

PROCEEDINGS
of the
WORLD ASSEMBLY
of the
World Council
for the Welfare of the Blind

August 5 through 13, 1954

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AMERICAN FOUNDATION
FOR THE BLIND INC.

PROCEEDINGS

of the

WORLD ASSEMBLY

of the

World Council for the Welfare of the Blind

held at

UNESCO HOUSE

19 Avenue Kleber

Paris 16, France

August 5 through 13, 1954

The purposes of the Council shall be to work for the welfare of the blind throughout the world by providing the means of consultation between organizations of and for the blind in different countries, and for joint action wherever possible towards the introduction of minimum standards for the welfare of the blind in all parts of the world and the improvement of such standards.

World Council for the Welfare of the Blind

Organisation Mondiale Pour la Protection Sociale des Aveugles

Registered Office:

14 rue Daru
Paris 8, France

Office of the Secretary General:

22 West 17th Street
New York 11, New York

Certain of the papers included in these Proceedings were originally delivered in French and, while every care has been taken to ensure accuracy in translation, it is possible that some slight variations from the original structure and sense may have occurred. Furthermore, certain papers prepared in the English language were delivered by speakers not entirely familiar with that language. Some editing has therefore been required. Our apologies are submitted for any slight inaccuracies that may have resulted therefrom.

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TABLE OF CONTENTS

BACKGROUND OF THE CONFERENCE	1
A MESSAGE FROM THE PRESIDENT	6
CONFERENCE PARTICIPANTS	
Official Delegates	7
Official Observers	10
Observers	11
OPENING SESSION	
Opening Remarks	13
Addresses of Welcome	
Emmanuel Temple	13
Dr. Luther Evans	14
Dr. Roger Pinoteau	15
Comm. H. Izaac	16
Address of Response	
George L. Raverat	17
Messages	18
ORGANIZATIONAL SESSION	
Roll Call and Examination of Proxies	21
Presentation of Program Outline and Rules of Procedure	21
Presentation of Program of Local Events	22
Election of Conference Committees	
Steering Committee	23
Planning and Budget Committee	23
Resolutions Committee	24
MEDICAL ASPECTS OF BLINDNESS IN THE 20TH CENTURY—CAUSES AND CURES	25
Extent of Blindness in Various Areas of the World and	
Principal Causes from Medical Point of View	26
Dr. P. Bailliart	
Preventing Blindness in Underdeveloped Territories	37
John F. Wilson	
Discussion	43
Resolution	44
A DEFINITION OF BLINDNESS—ITS BASIS AND PURPOSE	45
How Should Blindness be Defined in the 20th Century	45
Ernst Jorgensen	
Definitions as They are Necessary to and as They Affect	
Educational Services to Blind Children	52
Dr. W. D. Wall	
Definitions as They Apply to Economic Benefits	54
George Card	

Definitions as They Apply to Vocational Rehabilitation Services	56
A. A. Bennett	
Discussion	58
Resolutions	60
BUSINESS SESSION	
Report on the Activities of the Executive Committee Since the First General Assembly	61
Treasurer's Report	65
Consideration of Proposed Constitutional Amendments	66
Election of Nominating Committee	69
REPORTS FROM CONSULTATIVE COMMITTEES AND SPECIALIZED CONFERENCES	
General Summary of the Work of the World Braille Council	71
Prof. Pierre Henri	
Beirut Conference on Perso-Arabic Braille	75
El Sayed Fattah	
Montevideo Conference on Spanish-Portuguese Braille	79
Juan Antonio Pardo Ospina	
International Conference on Braille Music	84
Louis W. Rodenberg	
Report on International Conference of Educators of Blind Youth	90
E. H. Getliff	
Discussion	93
Resolutions	94
20TH CENTURY PROBLEMS IN DEVELOPING NATIONAL SERVICE PROGRAMS	
Problems and Techniques in Establishing Blind Welfare Services In Asia and Africa	97
Sir Clutha Mackenzie	
Typical Problems Encountered in Organizing New Programs in Latin America	110
Dr. Andres Bustamente Gurria	
Common Problems Related to Work for the Blind in Latin America	114
Prof. Alejandro Meza	
Typical Problems Encountered in Organizing New Programs in India.....	118
Capt. H. J. M. Desai	
What Assistance is Available from Internationally Constituted Organizations	121
Eric T. Boulter	

Summary of Current United Nations Activities in Favor of the Blind	128
A. Van der Goot	
Resolution	131
20TH CENTURY VOCATIONAL HORIZONS—	
THE BLIND AS EMPLOYED CITIZENS	132
Particular Problems that Confront Work for the Blind in the Middle East in the Vocational Area	133
Dr. M. A. Nour	
Particular Problems that Confront Work for the Blind in the Far East in the Vocational Area	139
Kingsley C. Dassanaiké	
Some Aspects of Training and Employment in Sheltered Workshops and Home Workers' Schemes	145
S. W. Starling	
Merchandising and Industrial Occupations	152
Joseph F. Clunk	
Training and Employment of Blind Persons as Telephone Switchboard Operators	159
F. W. Gust	
Resolution	166
ECONOMIC SECURITY FOR THE BLIND IN THE 20TH CENTURY—PHILOSOPHIES AND METHODS	167
Economic Security for the Blind in Australia	167
Charles W. Bennett	
Economic Security Through Financial Assistance to the Blind from Private or Governmental Sources	172
Capt. M. C. Robinson	
Discussant	178
H. A. Wood	
Discussant	182
Herman H. Roose	
Resolution	184
NEW HORIZONS FOR THE MULTIPLY-DISABLED BLIND	186
Opportunities for the Additionally Handicapped Blind	186
J. C. Colligan	
Discussant	192
Mitat Enc	
Discussant	199
Stevan Uzelac	
Discussion	203
20TH CENTURY PROGRESS IN MEETING THE GEN- ERAL WELFARE NEEDS OF THE BLIND	204

Cultural, Juridical and Social Conquests and Perspectives for the General Welfare of the Blind	205
Prof. Paolo Bentivoglio	
Current International Activities for the General Welfare of the Blind	208
Eric T. Boulter	
Statement from the World Veterans Federation	212
Rene Guicharnaud	
What Special Aid is Necessary and Effective for the War Blinded	213
W. G. Askew	
Supplementary Information on Services to the War Blinded	219
Henri Amblard	
Resolution	221
EXPANDING HORIZONS FOR THE BLIND THROUGH TECHNICAL SCIENCE	222
Deaf-Blind Communicators and Miscellaneous Mechanical Aids	223
Prof. Dr. Carl Strehl	
Devices for Assistance in Mobility	227
Charles Hedkvist	
Current Status of Efforts to Design Reading Machines	232
Dr. Walter Blum	
Sound Recording Developments	239
M. Robert Barnett	
Solid Dot Braille and Related Matters	246
J. C. Colligan	
Summary of Technical Efforts for Improved Production on Braille	250
Edward J. Waterhouse	
Discussion	254
Resolutions	254
FINAL BUSINESS SESSION	
Consideration and Adoption of Resolutions	256
Report of Planning and Budget Committee	262
Report of Nominating Committee on Election of Execu- tive Committee	263
Report of Nominating Committee on Election of Officers	264
Vote of Thanks	265
Other Business	265
Closing Remarks	265
SERVICES AVAILABLE TO THE BLIND IN MEMBER COUNTRIES	267

Questionnaire	267
Summaries	
Australia	269
Brazil	271
Canada	272
Ceylon	272
Egypt	274
England and Wales	275
Finland	276
Germany	277
Greece	279
Holland	280
India	280
Italy	282
Japan	283
Lebanon	284
New Zealand	285
Spain	287
Switzerland	288
Thailand	289
United States	290
Yugoslavia	292
REPRESENTATIVE MEMBERSHIP	294
HONORARY MEMBERSHIP	298
OFFICERS AND EXECUTIVE COMMITTEE	299
COMMITTEES	
Standing Committees	
Committee on Technical Appliances	300
Committee on Professional and Urban Employment	300
Committee on Rural Activities	300
Committee on Prevention of Blindness	300
Committee on Services for the Deaf-Blind	300
Consultative Committees	
Consultative Committee on Education	300
Consultative Committee on Braille	301

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BACKGROUND OF THE CONFERENCE

During the International Conference of Workers for the Blind held at Oxford, England, in August, 1949, discussion took place concerning the possible creation of a permanent international organization that would provide a means of continuing consultation between workers for the blind in all countries and the opportunity for joint action wherever such would be in the interests of the sightless.

A Planning Committee was formed to study the question and present its recommendations to the Conference. At its session on August 12, the Planning Committee report was received and after discussion the following resolution was adopted unanimously.

In view of the desire, unanimously expressed by members of the Conference, to establish a permanent organ for consultation between organizations of and for the blind in different countries, and for joint action wherever possible, and of the offer made by the American Foundation for Overseas Blind to provide executive and clerical services to an International Committee up to the end of 1950 as an experimental period, this Conference approves the establishment of an INTERNATIONAL COMMITTEE FOR THE WELFARE OF THE BLIND (COMITE INTERNATIONAL POUR LA PROTECTION SOCIALE DES AVEUGLES), on the understanding that a member of the staff of the AFOB may serve as a member and will act as its Secretary, and that the operating costs of the Committee will be met by the nations here represented; that the Committee be constituted of nine members—five representing France, Germany, Great Britain, Italy and the United States; one, Scandinavia; and one, the Benelux and smaller European countries; two places being left open for representation from countries of Eastern Europe; and that the following be appointed as members of the Committee until the end of 1950:

Belgium	Monsieur G. Borre
Denmark	Herr Ernst Jorgensen
France	Monsieur P. Guinot
Germany	Dr. Carl Strehl
Great Britain	Mr. W. McG. Eagar
Italy	Signor Aurelio Nicolodi
Poland	Dr. Vladimir Dolanski
United States	Mr. Eric T. Boulter

The International Committee for the Welfare of the Blind met at the close of the Oxford Conference and elected its offi-

cers as follows: — President, W. McG. Eagar; Secretary-Treasurer, Eric T. Boulter. It was agreed at this meeting that the major responsibilities of the Committee would be:

A. To assist the Oxford Conference Organizing Committee in its task of bringing to the attention of the United Nations, its Specialized Agencies and national governments the resolutions adopted at Oxford and assist towards their implementation throughout the world.

B. To take any additional action that may be required towards the expansion of international effort on the governmental and non-governmental levels that would contribute towards the provision of minimum standards of service to blind people everywhere.

C. To prepare a draft Constitution for and take all necessary preliminary legal steps towards the creation of a permanent international organization which would meet the Oxford Conference objectives and gain recognition as the international non-governmental organization responsible for all forms of consultation affecting the well-being of the blind.

The International Committee met in Paris from January 31 to February 2 and from October 4 to 6, 1950, to further these plans. At the first of these meetings it was agreed that full responsibility for continuing negotiations with the United Nations, its Specialized Agencies and governments would be assumed by the Committee since the Oxford Conference Organizing Committee had by then discharged the functions delegated to it.

The second meeting was concerned mainly with the preparation of the draft Constitution. On completion of this task it was agreed that all delegates to the Oxford Conference (to which body the International Committee remained responsible) would be invited to serve as the first General Assembly of a permanent organization, tentatively named World Council for the Welfare of the Blind (*Organisation Mondiale pour la Protection Sociale des Aveugles*). It was further agreed that a meeting of the said General Assembly would be called in the summer of 1951 to adopt the Constitution and complete the formal requirements by which the organization would achieve permanent legal status.

It should be recorded that certain changes had meanwhile occurred in the constitution of the International Committee for the Welfare of the Blind. In 1950 Dr. V. Dolanski regretfully informed the Committee for the Welfare of the Blind that Poland found it necessary to withdraw its membership so that he could no longer serve. Subsequently the Committee approved the admission of Yugoslavia as a member country, and invited the President of the Association of the Blind of Yugoslavia,

Mr. Stevan Uzelac, to serve as a member of the Committee.

Late in 1950 the Committee learned with deep regret of the death of Cavaliere Aurelio Nicolodi. It was subsequently agreed that his place on the Committee be filled by Prof. Paolo Bentivoglio, President of the Italian Union of the Blind.

At the close of the Committee meeting held in October, 1950, M. Paul Guinot submitted his resignation, the position thus vacated being subsequently filled by M. Louis Renaux, Secretary General of the Association Valentin Haüy, on the recommendation of the group of delegates who represented France at the Oxford Conference. In the late Spring of 1951 Mr. Ernst Jorgensen accepted an appointment as Social Affairs Officer for the Blind in the United Nations Division of Social Affairs and upon taking up his appointment in New York relinquished his seat on the Committee, being replaced by Mr. Charles Hedkvist, Secretary of the Swedish Union of the Blind (De Blindas Forening).

On July 18, 1951, the International Committee held its final meeting in Paris and on the following day presented its report and a draft Constitution to the first General Assembly of the permanent organization. At that meeting the Constitution was adopted, the name "World Council for the Welfare of the Blind" being accepted, and provision made for the convention of further General Assemblies at intervals of not more than five years, the day-to-day administration of the Council's affairs being delegated to a group of officers and an Executive Committee. The officers and Executive Committee elected at that time were as follows:

Col. E. A. Baker (Canada), President
 W. McG. Eagar (United Kingdom), Vice President
 Prof. Dr. Carl Strehl (Germany), Vice President
 Eric T. Boulter (United States), Secretary General
 Henri Amblard (France), Treasurer
 M. Robert Barnett (United States)
 Paolo Bentivoglio (Italy)
 Gerard Borre (Belgium)
 Charles Hedkvist (Sweden)
 Stevan Uzelac (Yugoslavia)

By unanimous vote of the Assembly, Honorary Life Memberships were awarded to Miss Helen Keller, Mr. W. McG. Eagar (United Kingdom), Mr. George L. Raverat (France) and Dr. Robert B. Irwin (United States). Subsequently in 1953, Honorary Life Membership was awarded to Mr. Harald Thilander (Sweden).

At its first meeting on July 18, 1951, the Executive Commit-

tee created a Technical Committee with responsibility for encouraging and co-ordinating international research towards the development of new and better appliances for the blind. This Committee was composed of Dr. Carl Strehl (Germany), Chairman, M. Robert Barnett (United States), J. C. Colligan (England), and Charles Hedkvist (Sweden).

In 1952 Mr. Eagar submitted his resignation from the United Kingdom delegation and the Executive Committee, feeling that his seat should be filled by a person currently holding an executive position in work for the blind. His resignation having been accepted with regret, Mr. E. H. Getliff was invited to fill the vacant seat on the Executive Committee. The vice-presidency formerly held by Mr. Eagar was left vacant.

The Constitution required that the Executive Committee should meet at least once each year. In fulfillment of that provision the committee met at Bussum, Netherlands, in July, 1952, and at Como, Italy, in August, 1953. At the latter meeting it was agreed that the spirit of the Constitution required that the Representative Membership of all participating countries should be provided with opportunity for a full exchange of views and experiences at intervals of no more than five years. As the 1951 Assembly had been concerned solely with constitutional and legal questions, no opportunity had then been provided for the discussion of professional topics. It was therefore agreed that the date of the second General Assembly should be set approximately five years from the date of the Oxford Conference, that is, in the summer of 1954. The Executive Committee therefore elected a Program Committee composed of M. Robert Barnett (United States) Chairman, E. H. Getliff (United Kingdom), Prof. Dr. Carl Strehl (Germany), Pierre Henri (France), and Hans C. Seierup (Denmark), and a Local Arrangements Committee composed of Henri Amblard (France), Chairman, Louis Renaux (France) and F. Abbott Ingalls (AFOB Paris), delegating to those committees responsibility for making detailed arrangements concerning the conduct of the second Assembly. It was agreed at the same meeting that the co-operation of an appropriate international organization such as UNESCO, the International Labour Office, or the World Health Organization should be sought to ensure that adequate accommodation, interpretation services, etc., would be available. In later correspondence it was determined that UNESCO would be prepared to make conference rooms, interpretation equipment and interpreters available to the Council. It was therefore agreed that the Assembly would be held at UNESCO House in Paris in August, 1954.

In December, 1951, UNESCO, which had for the previous

two and one-half years conducted an international program designed to achieve worldwide uniformity in the allocation of braille symbols, created the World Braille Council to ensure continued international activity towards uniformity. In July, 1952, the International Conference of Educators of Blind Youth, convened in Bussum, Netherlands, in implementation of an Oxford Conference resolution, resolved to create a permanent organization composed of educators of the blind. As a result of this resolution the permanent International Conference of Educators of Blind Youth was created. It being generally recognized that negotiations with international organizations and governments would be conducted more satisfactorily if a multiplicity of international organizations purporting to speak for the blind could be avoided, the World Braille Council and the International Conference of Educators of Blind Youth requested the Executive Committee in 1953 to recognize them as consultative committees of the World Council for the Welfare of the Blind. The Executive Committee gave its consent and it was therefore agreed that the Second General Assembly would serve as a meeting ground for those interested in the specialized problems of the World Braille Council and International Conference of Educators of Blind Youth, in addition to its function as a forum for those concerned with more general aspects of the work.

Between 1951 and 1954 the Executive Committee concentrated on expanding the Council's membership to include nations in all parts of the world. It furthermore maintained its program of co-operation with the United Nations, UN Specialized Agencies and international non-governmental organizations. It played an important role in the preparation of recommendations submitted to and approved by the UN Economic and Social Council and the UN General Assembly which required the Bureau of Social Affairs and the interested Specialized Agencies to plan and introduce a co-ordinated program for the rehabilitation of the physically handicapped including the blind. The Council also accepted a major role in the conduct of meetings of non-governmental organizations held in Geneva in 1951 and in New York in 1953, these meetings leading to the creation in 1953 of the Conference of World Organizations Interested in the Handicapped, with WCWB as a founder member.

These then have been the negotiations that have preceded the calling of the Second General Assembly, attended not only by Representative Members of the Council, but also including representatives of consultative committees, the United Nations, its Specialized Agencies and interested non-governmental organizations.

A MESSAGE FROM THE PRESIDENT

On behalf of the World Council for the Welfare of the Blind I extend a cordial welcome to all delegates and friends who are able to join with us in this first full meeting of our General Assembly. It is our earnest hope that through friendly understanding and co-operation services for the blind may be developed and progressively improved throughout the world.

We are most grateful for the contributions in service and funds which have assured our meeting in Paris. Our grateful thanks are due to:

Dr. Luther Evans, Director-General of UNESCO and members of his staff, for so generously providing our meeting place and facilities

For financial grants:

The Marguerite T. Doane Charitable Foundation

American Foundation for the Blind

American Foundation for Overseas Blind

Royal National Institute for the Blind

St. Dunstan's

Royal Blind School, Edinburgh

Scottish National Institution for the War Blinded

Canadian National Institute for the Blind

Chairman M. Robert Barnett and members of the Assembly Program Committee

Chairmen, speakers, panel members and discussants who have so generously agreed to participate in our program

Chairman Henri Amblard and members of the Assembly Local Arrangements Committee

Commandant H. Isaac, President of the Union des Aveugles de Guerre and members of his staff for the accommodation of many delegates

Members of the Executive Committee, Consultative Committees on Braille and Education and the Committee on Technical Appliances

It is our pleasure to welcome representatives of national and international governmental and non-governmental organizations attending the Assembly.

I am sure you will all remember the generosity of our friends and be encouraged by their interest in the blind. We hope that the results of this Conference may encourage them to continue their interest in our work. I am confident that all who join us in this Conference will learn much that may be of great value in their chosen field of services for the blind and will return, each to his own land, encouraged to even greater effort.

E. A. BAKER

CONFERENCE PARTICIPANTS

OFFICIAL DELEGATES

Representative Members

Alfred Allen, Secretary General
American Association of
Workers for the Blind
15 West 16th Street
New York 11, New York

*Henri Amblard,
Secretary General
Union des Aveugles de Guerre
49 Rue Blanche
Paris 9, France

C. H. W. G. Anderson,
Headmaster
Royal Blind School
Craigmillar Park
Edinburgh 9, Scotland

W. G. Askew, Secretary
St. Dunstons
1 South Audley Street
London, England

*E. A. Baker,
Managing Director
Canadian National Institute
for the Blind
186 Beverley Street
Toronto, Canada

*M. Robert Barnett,
Executive Director
American Foundation for the
Blind
15 W. 16th Street
New York 11, New York

*Mrs. Sadie B. Bending,
President
Canadian Council of the Blind
96 Ridout Street, South London
Ontario, Canada

Charles William Bennett,
President
Australian National Council
for the Blind
557 St. Kilda Road
Prahran, Victoria, Australia

*Paolo Bentivoglio, President
Unione Italiana Dei Ceichi
Via Quattro Fontane 147
Rome, Italy

*Angelo Bonvino
Via Bonifacio N. 4/10
Genoa, Italy

*Gerard Borre, President
Ligue Braille
57 rue d'Angleterre
Brussels, Belgium

*Eric T. Boulter, Field Director
American Foundation for
Overseas Blind
22 West 17th Street
New York 11, New York

*Gian Emilio Canesi, President
National Braille Library
Via Bolognese n. 100
Florence, Italy

*George Card, Vice President
National Federation of the Blind
605 South Few Street
Madison, Wisconsin

Edward Walton Christiansen,
Director
New Zealand Institute
for the Blind
545 Parnell Road
Auckland, New Zealand

*Joseph F. Clunk
Pennsylvania Association
for the Blind
100 East Price Street
Philadelphia, Pennsylvania

J. C. Colligan, Secretary General
Royal National Institute
for the Blind
224 Great Portland Street
London W1, England

Saman Damrong, Secretary
Foundation for the Welfare
and Education of the Blind
Bangkok, Thailand

Kingsley Dassanaikie, Principal
School for the Blind
Mt. Lavinia, Ceylon

Capt. H. J. M. Desai,
Honorary Secretary
National Association
for the Blind
Noman Manzil,
653 Wadia Street
Tardeo
Bombay, India

*Jose Esquerro Berges, Director
Organization Nacional de Ciegos
Lista 18
Madrid, Spain

*Mithat Enc, Director
Ankara School for the Blind
Ankara, Turkey

E. H. Getliff, Superintendent
Royal School of Industry
for the Blind
Westbury-on-Trym
Bristol, England

*Dr. Alfons Gottwald, President
Deutsches Blindenverband
Schwannstr. 18
Bad Godesberg, Germany

Paul Guinot
Cannes Blanche
58 Avenue Bosquet
Paris 7, France

Dr. Andres Bustamente Gurria
Secretaria de Salubridad
y Asistencia
Director General de
Rehabilitation
Mexico, D. F.

Eero J. Hakkinen, Principal
School for the Blind
Kuopio, Finland

*Charles Hedkvist, Secretary
De Blindas Forening
Gotslandsgatan 47
Stockholm, Sweden

Francisco Luis Hernandez,
Principal
School for the Blind
Medillin, Colombia

Hideyuki Iwahashi, Director
Osaka Lighthouse for the Blind
Osaka City, Japan

*Commandant Henri Izaac,
President
Union des Aveugles de Guerre
49 Rue Blanche
Paris, France

D. Edward Jonathan, Principal
Schools for the Blind
Palamcottah, India

*Halvdan Karterud
Ovre Mollenberggt. 76
Trondheim, Norway

Ramchandra Rao Kavalgikar,
Principal
Government School for the Blind
Hyderabad, Deccan, India

*Emmanuel Kephakis, Director
Agricultural School
for the Blind
Sepolia, Athens, Greece

*Dr. Karl Kirchner
Union of the War Blind
Gausstrasse 104
Stuttgart, Germany

Donatien Lelievre, Director
Institution Regionale des Sords-
Muets, et Jeunes Aveugles
61 rue de Marseilles
Bordeaux, France

*Milos Licina, Deputy President
Association for the Blind
of Yugoslavia
Post Box 807
Belgrade, Yugoslavia

*Simone Lo Sciuto, Director
Institute for the Blind
Piazza General Cascino no. 111
Palermo, Italy

*Dr. Hans Ludwig,
First Chairman
Union of the War Blind
Schumannstrasse 35
Bonn, Germany

*Alejandro Meza
Manzana 3, Lote 18
Col. Heroes de Churubusco
Mexico, D. F.

Dr. M. A. Nour, Director
Demonstration Centre for the
Rehabilitation of the Blind
302 Sh. Terret El Gabal
Zeitoun, Cairo, Egypt

*James O'Keeffe, Secretary
Irish National League
for the Blind
35 Gardiner's Place
Dublin, Ireland

*Juan Antonio Pardo Ospina,
Director
National Federation of
the Blind
Carrera 10, N. 15-80
Bogota, Colombia

*Prof. Maurilio Alfaro Proa
Paseo de la Reforma No. 12
Desp. 210 y 211
Mexico, D. F.

*Louis Renaux,
Secretary General
Association Valentin Haüy
9 rue Duroc
Paris 7, France

*Antoine Salis
27 rue Louis Braille
St. Etienne, Loire
France

*Silvestro Sasso
Via Garruba n. 3
Bari, Italy

*Hans Cai Seierup, Director
Dansk Blindesamfund
Randersgade 68
Kopenhagen, Denmark

Amal Shah, Vice President
National Association
for the Blind
Calcutta Blind School
Calcutta, India

*Dr. Emil Spahr, President
Swiss Federation of the Blind
Trottenstrasse 33
Zurich, Switzerland

S. W. Starling, Secretary
General Welfare of the Blind
257 Tottenham Court Road
London, England

*Prof. Dr. Carl Strehl,
President
Verein Der Blinden
Geistesarbeiter
Liebigstrasse 11
Marburg-Lahn, Germany

Dr. Jesus Tamesis, Secretary
Philippine Ophthalmological and
Otolaryngological Society
19 Macopa Street
Quezon City, Philippines

Robert Thompson,
Vice President
American Association
of Instructors of the Blind
3815 Magnolia Avenue
St. Louis, Missouri

*F. G. Tingen, Secretary
Stitching "Het Nederlandse
Blindenwezen"
Linnaeusparkweg 194
Amsterdam, Netherlands

*Tokujiro Torii
Kinki Braille Committee
11 Kamiwakakusa-cho
Murasinko, Kamikyo-ku
Kyoto, Japan

*Umberto Trani
Viale Beatrice d'Este n. 15
Milan, Italy

*Stevan Uzelac, President
Association for the Blind
of Yugoslavia
Post Box 807
Belgrade, Yugoslavia

*Luis Blanco Valldeperez
Consejo Superior de Ciegos
Madrid, Spain

Dr. Louis van Schalkwijk,
Chairman
S. A. National Council
for the Blind
P. O. Box 1343
Pretoria, South Africa

*Jose Espinola Veiga
Instituto Benjamin Constant
Rio de Janeiro, Brazil

Rudolph Winter, Director
Association of German
Teachers of the Blind
Bleekstrasse 22
Hannover-Kirchrode,
Germany

Honorary Member

George L. Raverat
36 rue Raymond Poincare
Vaucresson
Seine et Oise, France

OFFICIAL OBSERVERS

Members of WCWB Consultative Committees

El Sayed A. Fattah,
Inspector General
Schools for the Deaf and Blind
Ministry of Education
Cairo, Egypt

*Pierre Henri, Principal
National School for
the Young Blind
56 Boulevard des Invalides
Paris, France

*John Jarvis,
International Correspondent
Royal National Institute
for the Blind
224 Great Portland Street
London W1, England

*Sir Clutha Mackenzie,
Chairman
World Braille Council
(UNESCO)
c/o Westminster Bank
34 Sloane Square
London SW1, England

*Louis W. Rodenberg
UNESCO Consultant
on Braille Music
Illinois School for the Blind
Jacksonville, Illinois

Mr. Edward J. Waterhouse,
Director
Perkins Institution and
Mass. School for the Blind
Watertown, Massachusetts

*John F. Wilson, Director
British Empire Society
for the Blind
121 Victoria Street
London SW1, England

A. A. Bennett
Manpower Division
International Labor Office
Geneva, Switzerland

Dr. P. Bailliart, President
International Society for the
Prevention of Blindness
Paris, France

Dr. Aug. Walter Blum
Prinzenstrasse 2. (20a)
Hameln Weser, West Germany

F. W. Gust
Wernerwerk fur
Fernmeldetechnik
Siemens & Halske
Postachliessfach 187
Speyer/RH, Germany

*Capt. M. C. Robinson,
President
American Association
of Workers for the Blind
1101 Broadway West
Vancouver, B. C.

H. H. Roose
Johannapark 3
Amsterdam, Holland

H. A. Wood, Executive Secretary
North Carolina State
Commission for the Blind
Mansion Park Building
Raleigh, North Carolina

A. Van der Goot,
Special Asst. to the Director
Division of Social Welfare
United Nations
New York, New York

Governmental Observers

Miss R. M. Grainger
Ministry of Labour and
National Service
London, England

Eugene Murphy
United States Veterans
Administration
New York, New York

Miss Mary Switzer
Office of Vocational
Rehabilitation
Department of Health,
Education and Welfare
Washington, D. C.

Observers from International Organizations

Rene Guicharnaud
Director of Rehabilitation
World Veterans Federation
27 rue de la Michodiere
Paris, France

Pierre Navaux
Division of Mass Communication
UNESCO
19 Avenue Kleber
Paris, France

OBSERVERS

Mrs. E. A. Baker
Toronto, Canada

Miss L. Crozier, Secretary
Canadian Council of the Blind
96 Ridout Street South
London, Ontario
Canada

Mr. William Bending
London, Ontario

Mrs. Charles William Bennett
Victoria, Australia

Mrs. T. L. Cummins
Egen-Grove School for
Mentally Retarded Children
Webster Grove, Missouri

Mrs. Paolo Bentivoglio
Rome, Italy

*Miss Jeanne Cypihot
Montreal, Canada

Mrs. S. V. Bhandarker,
Secretary
Dadar School for the Blind
Bombay, India

Miss C. C. du Toit
3 Wetherby Gardens
London SW 5, England

Mrs. Angelo Bonvino
Genoa, Italy

Mrs. E. H. Getliff
Bristol, England

John Breuel
American Foundation
for the Blind
15 West 16th Street
New York 11, New York

Jean-Sebastian Gauvrit
Institution Regionale des
Sourds Muets et Jeunes
Aveugles
61 rue de Marseilles
Bordeaux, France

Mrs. Gian Canesi
Florence, Italy

Miss E. J. Geyer
3 Wetherby Gardens
London SW 5, England

Mrs. George Card
Madison, Wisconsin

Mrs. Alfons Gottwald
Bad Godesberg, Germany

Mrs. Eero J. Hakkinen
Kuopio, Finland

F. Abbott Ingalls, Director
Europe-Middle East Region
American Foundation
for Overseas Blind
14 rue Daru
Paris 8, France

Mrs. Halvdan Karterud
Trondheim, Norway

Mrs. Karl Kirchner
Stuttgart, Germany

F. Kooken, Treasurer
Catholic Blind Organization
Don Boscostraat 9
Eindhoven, Netherlands

D. H. Koster
School for the Blind
Bussum, Netherlands

Leo Kratz
Union of the War Blind
Koln-Junkersdorf, Germany

Miss Ellen Leavy
American Foundation
for Overseas Blind
22 West 17th Street
New York 11, New York

Mrs. Milos Licina
Belgrade, Yugoslavia

Mrs. Hans Ludwig
Bonn, Germany

Miss Marina Magaloff
American Foundation for
Overseas Blind
14 rue Daru
Paris, France

Mrs. Alejandro Meza
Mexico, D. F.

Dr. Richard Montgomery
Seth Low Hall
Columbia University
New York, New York

Mrs. James O'Keeffe
Dublin, Ireland

Prof. Guiseppe Rao
Palermo, Italy

Miss Madeleine Regnier
American Foundation
for Overseas Blind
14 rue Daru, Paris, France

Miss Clara Richter
603 Eastern Parkway
Brooklyn, New York

Mrs. M. C. Robinson
Vancouver, B. C., Canada

Dr. Hilde Rogler
Marburg-Lahn, Germany

Chrysostome Rousseau
Institution Regionale des Sourds
Muets et Jeunes Aveugles
61 rue de Marseille 61
Bordeaux, France

Mrs. Silvestro Sasso
Bari, Italy

Mrs. Emil Spahr
Zurich, Switzerland

Anne Margrethe Smith
Oslo School for the Blind
Oslo, Norway

Mrs. S. W. Starling
London, England

Mrs. Robert Thompson
St. Louis, Missouri

Sven Thornstrand
Stockholm, Sweden

Mrs. F. G. Tingen
Amsterdam, Netherlands

Miss Biancamaria Trani
Milan, Italy

Mrs. Jose Espinola Veiga
Rio de Janeiro, Brazil

FIRST SESSION Thursday Evening, August 5, 1954

Chairman: Col. E. A. Baker, M.C., O.B.E., President, World Council for the Welfare of the Blind; Managing Director, Canadian National Institute for the Blind, Toronto, Ontario, Canada

Opening Remarks by the Chairman

As your President, I extend to each of you a sincere welcome to this Conference. I earnestly hope that your deliberations will do much to promote the welfare of the blind and efforts to prevent blindness in your own countries and throughout the world.

We are honored this evening by the presence of representatives of United Nations organizations, of the Government of France and the City of Paris. We have many important official observers and friends. I earnestly hope they will find our discussions significant and most helpful.

Addresses of Welcome

Emmanuel Temple, Deputy from Aveyron, Minister of Veterans Affairs, Government of France

The head of the Government, M. Pierre Mendes-France, with a severity justified by his heavy task has asked his ministers to refuse all public appearances, but he has wished to make an exception for the General Assembly of the World Council for the Welfare of the Blind so that the Government may be able, through me, to express its sincere greetings.

As Minister for Veterans, I have a better knowledge and a deep sympathy for the blind, the courageous, human, generous blind, whose thoughts are higher and purer because they are always tending towards the truths of the spirit and the heart. It is I who go amongst them to get the necessary strength for the fulfillment of my task. This will explain to you the pleasure and even the emotion which I feel in being with you at the time when you are just starting a work of considerable importance. At Oxford, in 1949, nineteen nations were represented. Today, thirty-two nations attend your Assembly. This shows the quality of your will and the value of your work.

I am a very busy man but I have curiosity. I have read your program. I must say that I don't think you have forgotten anything, and it seems to me that work does not frighten you. I have been impressed at the same time by the number and the quality of the problems you are going to discuss. Many of the subjects which you will study in detail during the course of the World Assembly, although not new to me, will be a source of valuable knowledge. Science and education, economic, professional and administrative problems, everything which concerns braille and its applications, employment of the blind, etc., all these subjects are mentioned in your program and each na-

tion brings the fruit of its experiences, each country gives to the common welfare a discovery or a new realization. In fact, your desire to give the blind a better standard of living is somehow the synthesis of your program. It is encouraging to see that those to whom Fate has been particularly cruel have the deepest social feeling—I was going to say the warmest heart. But they also have a sense of organization and a method born of adversity. Through adversity also they have reached that particular beauty which in the case of the blind must be called greatness of spirit.

To conclude, I will indulge with sadness in what you will probably consider a digression. Humanity is also in the dark. May your wonderful and fertile solidarity be an example. May the lesson taught by those who have never despaired bring hope to the world. I wish you success for the accomplishment of your wonderful task.

For yourselves, I wish the good, the excellent visit that you deserve.

***Dr. Luther Evans, Director General of UNESCO.**

It is an honour and a great pleasure for me to welcome you here today. UNESCO has been associated with your Council since its creation—since the Oxford Conference in 1949 at which UNESCO was represented by Sir Clutha Mackenzie. Since that date your Council has grown from a small group representing mainly the countries of Western Europe and North America into a truly international organization, drawing its membership from over thirty countries in five continents.

Such a body has an important role to play in the world today. In a few countries, services for the blind are well established, but this is still the exception rather than the rule. In far too many regions there is as yet insufficient recognition of the needs of the blind, insufficient provision of the special services and educational facilities which will allow blind persons to assume their proper place in the life of the community. Your Council can do much to bring progress in this great area of human development and, by international co-operation, raise the standards for the welfare of the blind in all parts of the world.

There are several aspects of UNESCO's programme which are of interest and importance to the blind. For instance, as part of its work to facilitate the international circulation of educational and cultural materials, UNESCO has been able to obtain considerable reductions and in some cases the abolition of customs duties on reading material and articles for the blind. Through the Gift

Coupon scheme UNESCO has been able to secure voluntary contributions to assist in equipping schools for the blind.

But UNESCO's major direct project in this field has been that of achieving uniformity in Braille notation. In a series of meetings between 1949 and 1951 the most serious problems regarding orthographic Braille were studied, and an important step taken towards uniformity. Several of you present here today have been associated with this work, and I take special pleasure in greeting you again at UNESCO House. In 1952 UNESCO set up the World Braille Council to further the work of uniformity, and in 1953 the World Council for the Welfare of the Blind recognized the World Braille Council as its own consultative body in this field. It is our hope that an even closer relationship may soon develop.

Finally, during the past year your Council and UNESCO have worked together on the important question of Braille music notation. It was thanks to the generous support of your Council that, a fortnight ago, a meeting of Braille music specialists held in this House was able to take a decisive step forward in revising and enlarging the 1929 international manual.

In the course of your meetings you will hear full reports on what has been achieved in these different matters. May I, in welcoming you today, assure you of the sympathy of UNESCO for your great aims, and express my sincerest good wishes for the success of your work.

Dr. Roger Pinoteau, Vice President of the Municipal Council of Paris

The city of Paris is particularly happy tonight to welcome you on the occasion of the General Assembly of the World Council for the Welfare of the Blind.

My friend, Dr. Bernard LAFAY, President of the Municipal Council of Paris, would like to have been present in person, as he has shown himself one of the most ardent supporters of those who have had the misfortune to lose their sight. Tied down by earlier commitments, he wished that, from among the members of the Municipal Council it should be a doctor who was entrusted with the mission of greeting you at the opening of your Congress, for all human ills, and yours in particular, are understood better by a doctor than by anyone else.

Paris during the past centuries has always shown affection for the blind due to the well-known sentimentality of the Parisian public and to the scientific research which is always in progress here.

Thus, 700 years ago, our great king, St. Louis, returning from the Crusades, opened the hospice of the QUINZE-VINGTS, in the year 1250, to care for those who, in the battles of Palestine,

had lost their sight, and those who for any other reason had become blind.

This was an action which Paris alone in the whole world was the first to undertake. Also in our capital, we have seen Valentin Haüy and Louis Braille working to bring to the blind the wonderful results of those researches which you all know.

Some years later, about the year 1930, Mlle. d'HERBEMONT and my friend Jean DELAGE launched the campaign for the use of WHITE CANES in that eminent newspaper "Echo de Paris," a campaign which has spread from Paris all over the world, bringing to the blind those expressions of kindness which are a mark of human solidarity. And you can see, Ladies and Gentlemen, in the overcrowded streets of our capital how much this initiative, started in Paris some time ago, stimulates the kind-hearted Parisians to offer needed help to their blind fellow-citizens.

Closer to us, after the war, it is our friend President Lafay, who, again in Paris, has been the promoter of the EYE BANK which is now flourishing and will soon make it possible to bring to the entire world a wonderful remedy for the tragedy of blindness.

I wish, at the same time that I am greeting you in the name of my capital, to remind you of the close ties which throughout French history have bound Paris to the blind. I am sure that during your visit you who have come from 32 nations, will be able to accomplish much, to improve social aid to the blind, warmed by the spirit of this city which has always known how to show to the men and women who have lost their sight such an understanding, an understanding which has given strength to her workers and stimulated them in making important discoveries.

I will end in expressing the wish that your efforts may bring good results for the blind of the world and that, under the beautiful light of our Ile-de-France sky, in the night of your misfortune, a flame of hope may spring up to shed a light of tender human solidarity.

Comm. H. Izaac, President of the Union des Aveugles de Guerre

I have been asked to say a few words to you tonight. I should be sorry to take too much of your time on the eve of so much work awaiting you in the numerous sessions that will be going on between August 6 and 13.

The report which I received after the meeting at Oxford has given me an idea of the considerable and delicate task which will now be ours. It is not a matter of preparing a work of pure

imagination, but to carry out resolutions based on the most noble and generous feelings, meticulously checked by scientific method.

In order to attain the aims proposed in the by-laws of the World Council for the Welfare of the Blind we should be informed, as much as possible, of the situation of the blind in the world and we must know exactly what are the limits of our power in order to improve the situation. As far as information is concerned, the fact that qualified delegates from various countries are meeting here allows us to believe that, apart from the sessions, private conversations will take place and permit exchanges of views, making our knowledge of the world of the blind stronger.

If the truth were known to us—a very audacious supposition, learned people being better aware of their ignorance than of their knowledge—we must assess our possibilities before setting to work. On this point our task will be easier thanks to the United Nations Charter, to the decisions of its General Meeting and its Economic and Social Council.

The blind are physically handicapped certainly, since they lack one of the most precious senses, but they are thinking men all the same, and have a right to claim the fulfillment of every item of the "Declaration Universelle des Droits de l'Homme."

We are primarily concerned with Articles 22 to 30 dealing with social rights, our essential wish being the social welfare of the blind. I shall only take the liberty of drawing your attention to Article 12, blaming every arbitrary interference in a man's private life, his liberty of thinking and writing. In his surroundings, in the social sphere or state where he is placed and where the observation of this principle might be forgotten, the blind man has to act just as any other man.

If we are well informed and know how far we can go we shall be able to decide what is most needful, before acting for the greatest welfare of the blind. Thus we shall have proved that we are men of good will. Then, patiently we must make this will triumphant. UNESCO well knows from experience that the most difficult task is not to draw up texts but to make men progress in the contacts they necessarily have with one another.

Address of Response

George L. Raverat, Honorary Member, World Council for the Welfare of the Blind, formerly European Director, American Foundation for Overseas Blind, Paris, France

I simply wish to ask you to allow me to express in your behalf our thanks to the speakers who preceded me, more especially to Mr. Emmanuel Temple, Minister of the Veterans, who represents the French Government. I will add that in a

democratic country such as France, we were greatly upset when we heard that the ministers were "in penance" because they are not allowed to appear in public. We were afraid that our foreign friends would not understand, and I am happy indeed that the Prime Minister made an exception in favor of our World Assembly and removed the interdict.

In his absence, Dr. Bernard Lafay, President of the Municipal Council of Paris—who is always on the move—asked Dr. Pinoteau, Vice-President, to represent him, which he did most graciously. He has extended to you, on behalf of the Municipal Council, an invitation to a reception at the Town Hall and I am certain you will appreciate this gesture. Unfortunately, most of you will be unable to see the magnificence of the building but you will feel there the heart and soul of Paris.

We also regret the absence of Dr. Luther Evans, Director General of UNESCO, but we will have the pleasure to meet him tomorrow. In your name I thank UNESCO for the facilities of all kinds extended on the occasion of the first General Assembly of the World Council for the Welfare of the Blind.

Our gratitude also goes to Major Izaac, President of the Union des Aveugles de Guerre, who is among us tonight, to our President, Col. Baker, and to all those who have to some extent contributed in making this international gathering an example of dignity and confidence for the future.

Messages

The following messages were read from:

The Hon. Dwight D. Eisenhower, President of the United States

"I am happy to extend cordial greetings to all delegates to the World Council for the Welfare of the Blind.

"Citizens of the United States are deeply interested in work done through both governmental and private sources to assure the blind the opportunity to participate as active members of our society. It is our feeling that work for the blind is consonant with the best democratic traditions and principles and that the entire society gains from efforts made on behalf of this fortunately small percentage of our neighbors. I am confident that the delegates assembled for this meeting share this belief.

"To all of you go my best wishes for a constructive and enjoyable meeting."

Mr. Dag Hammarskjöld, Secretary-General of the United Nations

"I take great pleasure in extending my best wishes to the Delegates to the World Assembly of the World Council for the Welfare of the Blind. One of the objectives of the United Nations is to help mankind to improve its standard of living and thus

to point its way to a more meaningful life. I feel confident that United Nations' endeavours to better the conditions for the blind will continue to receive your valuable support, just as I am sure that your decisions, based on the vast experience of your Council, will prove of the greatest value to those to whom you are giving so much energy, thought and time.

"In order to give you an account of the United Nations activities which are directly related to the work of the World Council for the Welfare of the Blind, I have delegated Mr. A. van der Goot, Special Assistant to the Director of the Division of Social Welfare to represent me at this important Assembly."

His Excellency H. S. Malik, Ambassador of India to France

"His Excellency hopes that this World Assembly will be a great success in promoting the cause of the welfare, education and rehabilitation of the visually handicapped throughout the entire world. On behalf of India, I can assure you that we will do our utmost to ameliorate the suffering of the two million blind people of India."

Mrs. Pacita M. Warns, Social Welfare Administrator, the Philippines

"I extremely regret my inability to attend the World Assembly due to heavy pressure of work. Please convey my warmest felicitations to all attending delegates and express our earnest desire to participate in an aggressive program for the welfare of the blind."

The Lord Mayor of Dublin, Ireland
(Excerpts)

"It is with feelings of the most profound pleasure that I, as Lord Mayor of Dublin, extend to Councillor O'Keeffe my heartiest good wishes on this the occasion of his departure to Paris to attend the International Conference to be held from the 5th to the 14th of August, under the auspices of the World Council for the Blind.

"The important work undertaken by this organization is but too little known in this country, and its magnificent achievements on behalf of the blind throughout the world over a period of years, has not received that measure of recognition to which it is so justly entitled."

The Mayor of Florence, Italy

"While our Parliament approves the pension law for the civilian blind, Florence, which is the intellectual center of the world of the Italian Blind, praises the work of the world organization for the blind and affirms its fellowship with her blind brothers."

The General Convention of the International League of Blind Esperantists

"The General Convention of the International League of Blind Esperantists meeting in Amsterdam salutes the World Assembly for the Welfare of the Blind, hopes that the World Council will accept Esperanto as an official language and wishes the Conference great success."

The National Union of the Blind in Uruguay

"The National Union of the Blind of Uruguay, being unable to attend this very important General Assembly, would appreciate receiving all documents resulting from the meeting which will be of value for the blind of the whole world.

"We participate in thought in the pilgrimage to Coupvray where the immortal Louis Braille was born.

"We deeply congratulate those who have initiated this valuable Assembly and extend best wishes for its success."

The Hyogo Prefectural Welfare Federation for the Blind, Kobe, Japan (Excerpt)

"We hereby take pleasure in expressing hearty congratulations on the opening of the 1954 session in Paris of the World Council for the Welfare of the Blind, to which Japan has been formally granted access in the capacity of a regular member."

SECOND SESSION Friday Morning, August 6, 1954 ORGANIZATIONAL SESSION

Chairman: Col. E. A. Baker

Roll Call and Examination of Proxies

Following the Roll Call, Mr. J. C. Colligan (United Kingdom), Chairman of the Proxy Committee, reported that he and the members of his Committee, Prof. Dr. Carl Strehl (Germany) and E. H. Getliff (United Kingdom), had received the following proxies for examination.

T. H. Smith (United Kingdom) to S. W. Starling
(United Kingdom)

Donatien Lelievre (France, who would arrive late at the
Conference) to Louis Renaux (France)

Dr. Horst Geissler (Germany) to Dr. Alfons Gottwald
(Germany)

Jose Aragones Artells (Spain) to Jose Esquerra Berges
(Spain)

Karl Meyer (Lebanon) to Kingsley Dassanaikie
(Ceylon)

Leopold Bick (Austria) to Prof. Dr. Carl Strehl
(Germany)

D. J. VanWyk (South Africa) to Dr. Louis van Schalk-
wijk (South Africa)

Sra. Dorina de Gouvea Nowill (Brazil) to Eric T.
Boulter (United States)

After due deliberation it had been decided that all proxies would be accepted with the exception of that of Sra. Nowill. The reason for this decision was that since Mr. Boulter was not from the Latin America region, it was felt that he would not be equipped to represent Brazil's interests.

Presentation of Program Outline and Rules of Procedure: M. Robert Barnett, Chairman, Assembly Program Committee; Executive Director, American Foundation for the Blind, American Foundation for Overseas Blind, New York, N. Y.

In presenting the Conference program to the delegates Mr. M. Robert Barnett, Chairman of the Program Committee, expressed grateful thanks to all those who had worked so energetically with him as members of the committee. He stated that the program as finally developed represented a team effort. In selecting subjects for professional examination and discussion he and his committee had endeavored to place on the program those matters which in their judgment were of most vital concern to blind people in all parts of the world and to all who work in the service of the blind. We were fortunate that outstanding figures who had gained world-wide respect in many different

aspects of work for the blind had accepted the Committee's invitation to present papers, to serve as chairmen, panel members and discussants at all professional conference sessions. In the name of the full assembly he expressed profound thanks.

Mr. Barnett outlined the simple rules of procedure that had been agreed upon by a joint meeting of the Program Committee and sessional chairmen. He explained that while the Council's President, Col. E. A. Baker, would assume the chair for all organizational and business sessions, the professional sessions would be conducted by the person selected by the Program Committee as being particularly qualified for the conduct of each meeting. The names of these persons appeared in the printed program. They would be introduced at the opening of each session by the Program Chairman and would in turn introduce the speakers, panel members and discussants. The formal papers for each session would be completed before discussion would be allowed, but within the limits of a crowded program maximum time would be allocated for such discussions towards the close of each session. Where deemed necessary a drafting committee would be named by the chairman at the close of the appropriate session, such committee being responsible for preparing a draft resolution covering the subject matter discussed and presenting such resolution to the conference resolution committee for examination and referral to the assembly at its closing session.

Mr. Barnett reminded the Assembly that opportunity had been provided for all delegates to prepare, in advance of the conference, answers to a circulated questionnaire covering all major aspects of service to the blind in their respective countries, and that such written summaries had been circulated to all delegates. This had been deliberately planned in order to conserve Conference time, and therefore no time would be granted to delegates wishing to present oral statements concerning the current stage of development of programs for the blind in their countries. Answers received by the Secretariat would subsequently be published in summarized form as a part of the Assembly proceedings.

Presentation of Program of Local Events: Henri Amblard, Chairman Assembly Local Arrangements Committee; Secretary-General, Union des Aveugles de Guerre, Paris, France

In presenting the program of local events to the Assembly, M. Henri Amblard, Chairman of the Local Arrangements Committee, assured the delegates that the conference would not be all work and no play. Many social events as well as activities of professional interest had been planned, in addition to the regular conference sessions.

On Friday evening, August 6, delegates and observers were cordially invited by the American Foundation for Overseas Blind to attend an informal reception at its European headquarters. Arrangements had been made for all conference participants to visit Coupvrey, the birthplace of Louis Braille, on Saturday afternoon, August 7. On Tuesday evening, August 10, all delegates and friends were invited by the Municipal Council of Paris to a reception at the City Hall.

On Wednesday afternoon, August 11, the delegates would have a choice of several activities. Bus tours to Versailles and the Historic Monuments of Paris had been arranged. Those interested were invited to visit the factory of "Les Cannes Blanche" at Boulogne where a number of blind people are employed at soap-making, and the premises of Croisade des Aveugles to see a demonstration of the Espinasse duplicator. A demonstration at 14 rue Daru of braille done on the new British vacuum forming machine could be arranged by appointment at any time during the duration of the Assembly.

The Union des Aveugles de Guerre cordially invited all delegates to a dinner at its hostel on the evening of Thursday, August 12. On behalf of our President, Col. E. A. Baker, M. Amblard invited all delegates and observers to the closing banquet of the Assembly to be held on Friday evening, August 13.

On behalf of all the delegates M. Amblard expressed grateful thanks to those who helped to make this program possible.

Election of Conference Committees

The following Conference Committees were elected:

Steering Committee

E. H. Getliff (United Kingdom), Chairman
Col. E. A. Baker (Canada)
M. Robert Barnett (United States)
Eric T. Boulter (United States)

Planning and Budget Committee

Charles Hedkvist (Sweden), Chairman
M. Robert Barnett (United States)
Prof. A. Bonvino (Italy)
E. W. Christiansen (New Zealand)
J. C. Colligan (United Kingdom)
Capt. H. J. M. Desai (India)
Mitat Enc (Turkey)
Milos Licina (Yugoslavia)
George L. Raverat (France)
Prof. Dr. Carl Strehl (Germany)
Jose Espinola Veiga (Brazil)

Col. E. A. Baker (Canada), ex-officio
Henri Amblard (France), ex-officio
Eric T. Boulter (United States), ex-officio

Resolutions Committee

Dr. C. W. Bennett (Australia), Convenor
Alfred Allen (United States)
Prof. Paolo Bentivoglio (Italy)
Gerard Borre (Belgium)
J. C. Colligan (United Kingdom)
Paul Guinot (France)
Charles Hedkvist (Sweden)
Donatien Lelievre (France)
Prof. Alejandro Meza (Mexico)
Louis Renaux (France)
Hans Seierup (Denmark)
Amal Shah (India)
Prof. Dr. Carl Strehl (Germany)

THIRD SESSION**Friday Afternoon, August 6, 1954****MEDICAL ASPECTS OF BLINDNESS IN THE
TWENTIETH CENTURY—CAUSES AND CURES**

Chairman: Alfred Allen, Secretary-General, American Association of Workers for the Blind, New York, New York, United States

I am afforded a high privilege this morning, to which I hope I may do some small justice. I am helped immeasurably by the knowledge that many of you are personal friends, some of many years' standing, upon whom I feel I may count for a tolerant forbearance of my admitted shortcomings. To all of you I bring the greetings and best wishes of the American Association of Workers for the Blind, which today I have the honor of representing.

In a world which is more and more tending to specialization in almost every field of professional and scientific activity, it is doubtless inevitable that those of us who in one way or another are engaged in programs of service to the blind should be no exception to this trend of our times. Thus it is understandable that we should, more and more, tend to concentrate on those particular phases of our responsibility which relate most closely to our day to day work—no matter whether they lie in the sphere of economic assistance, of vocational rehabilitation, of education of our blind youth, of developing programs designed to assist the aging blind, or in whatever field we focus our principal activities.

Thus, in a general sense we are all somewhat loosely joined together in an effort to provide a better, richer and more rewarding life for all our blind people, without, perhaps, feeling any overriding concern for those phases of our program which are not a matter of immediate and particular concern to each of us.

However, it is perhaps no less true to say that there is one field with which each of us does have a fundamental and primary concern, if we are to understand all our other problems, and if we are to be able to look forward to that happy day when the incidence of blindness may be reduced, through both prevention of blindness and restoration of sight. For indeed, this should be and is the one universal goal which every one of us would seek, from both its humanitarian and economic consequences to all people the world over. I am of course referring to the extent and causes of blindness in all parts of the world and to the efforts which are being brought to bear upon and to reduce blindness everywhere. It is a vast and intricate subject, and the world, small though it may seem to be, measured in terms of today's rapid communication and travel, is yet so large as to present to each of us certain difficulties in keeping abreast of

man's best efforts everywhere to deal with this vast problem in terms of modern techniques and scientific progress in the field of modern public health generally and ophthalmology in particular.

This afternoon we are indeed fortunate to have with us two men who have expert knowledge in their respective fields of service and from whom it is to be our privilege to learn much which we shall be able to remember and, it is hoped, bring into focus within the scope of our own programs.

EXTENT OF BLINDNESS IN VARIOUS AREAS OF THE WORLD AND PRINCIPAL CAUSES FROM MEDICAL POINT OF VIEW

Dr. P. Brailliant, President, International Association for Prevention of Blindness, Paris, France

No country is spared the scourge of blindness. In different degrees, it strikes everywhere. Any of us may be touched by it, for it is the final result of many illnesses which, sometimes strike suddenly, sometimes develop slowly, or the result of accidents which the progress of civilization seems to have multiplied. Besides, it does result from the natural, continuous use of a delicate organ. Can medicine, social assistance, hygienic services reduce the number of blind persons? Yes.

Prophylaxis of blindness is primarily the concern of those men and those organizations who are devoted to the treatment of eye diseases; many diseases which were formerly causes of blindness are today avoided, thanks to their efforts, or cured or at least reduced. The causes are better known. Rational methods have been substituted for empirical medication or uncertain operations, despite the skill of the surgeons. The use of anesthesia, better instruments, better diagnosis, sterilization and, still more revolutionary, the antibiotics have transformed the future of ocular infections.

We shall also see how hygiene and social medicine have forced the frequent causes of blindness to disappear by removing or at least reducing their number and their severity. The social side is of capital importance: to call the attention of the public to those infections which are little known, the means to recognize them at an early date, the need to treat them at the moment when a cure is possible, to tell them also what hygienic precautions are necessary in every day life—in town, in school, in the factory—these are some of the aims proposed for the national and international associations, and someone with real authority will soon speak to you about this. The problem of blindness and its prevention cannot be separated; the ophthalmologist who sees that his efforts to save the sight of a sick person are without result, who finds himself faced with a pathological condition

beyond his power of treatment, must not believe that his task is ended. He hopes for new researches, and he takes part in them in order to better understand the problems which face him.

If blindness is found in all countries, its division among them is very unequal. There are some countries more privileged than others. We would like to know, at least approximately, the number of blind persons in each, but this is not possible, and there are several reasons for this. One is the definition of blindness itself. This question will be discussed tomorrow, from various social angles. I raise the question today as an ophthalmologist, for whom also the limits of blindness are uncertain. Only those who cannot see any light—the totally blind—can be definitely classified. But social needs, the assistance laws, efforts towards retraining have forced a widening of the question. In certain countries, such as the one where we now are, persons who have a small amount of vision are classified “blind for practical purposes,” those whose vision is so reduced that they have only a “practical” minor advantage from it. There is also “professional blindness” where sight permits the following of certain professions—perhaps enough for a farmer but not enough for a mechanic, a carpenter or a builder. We know that we must give consideration to this relative blindness, but how can we fix its limits? It is not just to find an answer to a simple demographic curiosity that an international definition of blindness is necessary. It is needed for welfare agencies and for rehabilitation centers; one must know how and when these different agencies should step in.

It is very difficult to define blindness. In some countries the blind are defined as having less than $1/10$ normal vision; in others, less than $1/20$; in still others, where the definition is stricter or where there are many illiterates, the blind are classified as those who are incapable of moving about the streets alone, or who are unable to count fingers at less than one meter distant. All these methods contain deceptions, even those which, with apparent precision, are based on fractions of visual acuity. A person is considered to have $1/20$ of vision if he can identify at 2m.50 those geometric letters which are recognizable at 50 meters by a sighted person. But a difference of a few centimeters in the required distance, will it allow one to classify a person as blind or sighted? The man who can read the text at 2m.75 would not be blind; the man who could read it only at 2m.25 would be blind. What about good faith and intelligence in such narrow limits? Experience shows that visual acuity can be $1/15$ in the morning and $1/25$ in the evening, and the least variation of light makes a difference. The man who has an acuity

of 2 to 3/10 but with such a narrow field of vision that he cannot walk abroad although he can read a little, is he, for practical purposes, less handicapped than the man who, except in the central field, the region of distinct vision, has his field of vision intact? May not the man who courageously moves about the streets alone be blind? Must he be seated on a stone, begging, to be so considered? Shall we call a man blind who refuses the operation which would bring back his sight?

The oculist does not know how to fix the limits of blindness, based on the various and changeable laws of the different countries. Recently in response to the UN request for a definition of blindness, I said it was necessary to have an expert examination in each case, which should be based on the condition of the eye and on the degree of visual capacity.

The assistance laws have helped, if only in appearance, to increase the number of blind statistically. Certain countries have seen this number almost double suddenly as a result of laws giving the blind the right to receive assistance. Those who had not thought it worthwhile to list themselves as blind changed their point of view when it became a question of their right. The census has not been able to give us an exact number and even we ourselves find it difficult to reply to some questions. How much more so must it be for those whose sight is poor, or for their family. One must also consider individual and moral factors—a refusal to admit that one is not normal, self-respect perhaps, fear, under conditions of life already difficult, to feel oneself less competent than those who can read the papers. Finally in many countries, where the population is numerous and scattered far from medical centers, the basis for determination of the disease is almost entirely lacking.

How then can we talk about the incidence of blindness in the world? Using the sources available to us today we may perhaps say that there are not far from 250 blind persons per 100,000 inhabitants on the surface of the globe. Even this figure is uncertain as it comes from various and sometimes uncertain sources. This uncertainty is emphasized when we place the figure of 179 per 100,000 for England beside that of 172 for India where we know there is a great amount of blindness, and the 173 of the U. S., where prophylaxis is so advanced, beside the 124 for Venezuela and only 56 for Argentina with their vast, isolated regions. And let me add that certain countries, the U.S.S.R. among others, do not give us any figures at all today, so that a large portion of the world population does not enter into our estimates.

Blindness should naturally be less frequent in the more de-

veloped countries where hygiene is generally practised, where atmospheric and other conditions are more favorable, where proper nourishment exists, where famines are unknown and where medical care is more easily available. It is primarily in those countries where the incidence of blindness is greatest that our statistics are most at fault. Thus, blindness is more generally recognized in those countries where there is less of it.

In attempting to reach our goal, we must know the age of blindness; by that I mean the frequency of its occurrence at different stages of life. This is not difficult in countries where ophthalmic services are numerous and where there are institutions for blind children and homes for aged blind.

Blindness in childhood is not exceptional, it can even start with life. At the NATIONAL INSTITUTE in Paris where the average number of blind children is about 250, it seems that $1/3$ of these have never seen light, whether because of a congenital malformation or because of an early development even during life in the womb, of a disease which we will consider later. I do not consider as quite accurate the figure often mentioned of 5 to 6 blind children under 2 years of age per 100,000 inhabitants. This is an under-estimation of actual facts because the parents refuse to admit and still more to declare a handicap which they think is only temporary. Moreover, it is often difficult to discover early blindness unless it is total. The child may react to light and distinguish the outlines of his parents although already having lesions which make of him a blind person.

With advancing years new causes will appear, but often a slight affection, even congenital, will slowly—sometimes at 25 years of age—finally destroy vision completely. Many times during school years, a partial blindness will be discovered with a child unable to follow his lessons. This means that it is often an early condition which makes blindness seem more frequent at a later age. Blindness of youth will appear at any time in life; each period is burdened with the inheritance of the past. If we find at age 20, 25 blind persons per 100,000 inhabitants, we know that 5 of them were born blind, that others from early childhood had the lesions which were to bring on blindness, but the affection which we will consider later on may bring new causes.

In spite of the many causes of errors, statistics express the truth quite accurately when they show the frequency of blindness constantly increasing, gradually mounting until about 55, then shooting up after 70. In advanced old age, after 90, the proportion of blind people is very high. For a population of that age one might, I believe, talk of 50% being blind if we consider as such those who cannot read.

At each stage of life the frequency is higher for men than for women.

These figures are true for the most advanced countries; in others it is different. Mr. John Wilson is going to enlighten us on this question. Diseases dangerous for eyes, which here have almost completely disappeared, such as small-pox, trachoma, purulent conjunctivitis, the manifestations of inherited syphilis, or others almost unknown, such as onchocerciasis, increase in other countries the frequency of blindness from the early stage of life. The proportion according to age will not be changed, as years will not suppress the threat of the diseases mentioned above, and glaucoma, difficult to discover, and cataracts which have not been operated on, eye inflammations treated badly or too late, the lack of vitamins, which is dangerous at any stage of life, will cause much more blindness than in the countries where there is better care and where hygiene is better observed. In the less advanced countries the life span is often shorter, and because of that it has an influence on the incidence of blindness which will evidently be less marked, because the man who is capable of moving about his village alone is not considered as blind.

Thus the incidence of blindness is quite different according to the country. Mr. J. Wilson will show us what an enormous effect trachoma and onchocerciasis have in certain regions in Africa. These examples are very edifying; if statistics were complete they would show a large number of blind persons.

In touching on the causes of blindness I would like to avoid the purely medical aspect, but this is impossible. I will therefore try to limit myself to prophylaxis.

As regards blindness in children, we have already referred to the part played by the congenital malformations, faulty development of the eye in the early stages of life in the womb. Some are evident very early, such as infantile glaucoma which gives to a child's eyes the appearance of those of an adult, before they become enormous; congenital cataract, for which the "rubella" of the mother during the early months of pregnancy may be the cause, producing in the child's pupil a noticeable spot. Many other abnormalities can be easily recognized in the very early days of life; sometimes however they will only be noticeable later. In-breeding is often, too often considered as the cause of these abnormalities. For a number of years, I have been trying to trace this origin among the children at the Institut National des Jeunes Aveugles, in Paris. I find it without any doubt, but it does not seem to me to have a predominant importance. Among the children studied, there is only a slightly

higher proportion among the in-bred children. If in the mutual parents there is a fault which might affect vision through heredity, marriage between close relations should be avoided. But, even more so in a marriage between a man and a woman suffering from congenital affections—almost certainly hereditary—the transmission would be certain. Would it ever be possible to obtain the enforcement of measures which would eliminate retinal pigmentation, one of the most easily transmissible diseases which affect sight even in childhood and throughout entire life? All our efforts tend to advise people suffering from this disease not to procreate.

Alcoholism on the part of the parents is also a cause which cannot be overlooked. A new science, difficult yet full of promise—genetics—will doubtless result through its teaching in a decrease of congenital malformations. What is their incidence? Thinking of the cases which I have observed, we believe we can say that the proportion of children affected is scarcely one or two per 10,000, but all the cases sooner or later end in blindness.

Infectious diseases which affect the eye enough to cause blindness in a child are much fewer today than 50 years ago. Nowadays, their cure is almost certain. Small-pox, formerly responsible for many serious eye diseases, is extremely rare in most countries today. Ophthalmia in the new-born child, caused through contamination of the genital organs, is now exceptional since the prophylactic method developed by Crede became compulsory in most countries where there are social laws. At the Institut National des Jeunes Aveugles at Paris, ophthalmia was responsible for 18-20% of the cases 25 years ago; today it scarcely exists anymore. Moreover, if the prophylactic treatment had been forgotten, the antibiotics, if used in time, would ensure the cure.

Impetiginous lesions of the eye, so often associated, as one knows today, with manifestations of tubercular infection, used to cause a large amount of blindness 15 years ago. They have disappeared in our countries, thanks to the antibiotics and to the BCG vaccination. Hereditary syphilis scarcely counts today—the proportion has fallen from 10% twenty years ago, to 0.5%.

A new infection, toxoplasmosis, whose virus is impervious to the antibiotics, might seem of recent appearance. But is this only because one recognizes it more today because it was unknown formerly? Finally, in relation to the total population the number of cases of blindness caused by it are very few.

Injuries caused by accidents, especially resulting from games, which can always be avoided and which should be prevented by

legislation, are still responsible for 2 to 3% of the cases of blindness of children. Certain states in North America have already promulgated the necessary laws; they should be enacted everywhere.

Thus many causes of blindness in children may disappear in the more developed countries. This is not the case in those other countries; it is there that a prophylaxis with the necessary supporting services could most usefully be applied. Trachoma, small-pox, syphilis, tuberculosis, acute conjunctivitis from different causes, onchocerciasis are still the causes of considerable blindness among children as well as among adults. They could be eliminated or at least quickly reduced in number. Mr. John Wilson will tell you shortly of the effort already started in certain regions of Africa to control these.

With adolescence and maturity come new causes of blindness. Among them, we must mention injuries resulting from a blow. In addition to dangerous games, which we have already noted as affecting especially the eyes of children, we find injuries resulting from accidents at work. We pass without mentioning war injuries since we have as yet found no control for them. We are not thinking of such superficial work injuries as result from foreign matter which may hit the man working on a grindstone. Cared for in time by expert hands, they should always be cured completely without leaving any trace. But we refer to those injuries caused by a fragment of metal or glass going deep into the eye cavity, which may even cause the bursting of the eyeball. Often protective measures would avoid these accidents. Antibiotics, operations, electro-magnets which pull out the fragment after it has been located in the eye by X-ray, have reduced the number of cases of blindness due to the above mentioned causes. Burns of the cornea by acids or alkalines have less serious results in workshops where chemical neutralization can be effected almost immediately and the use of the cornea and conjunctiva grafts gives even better chances of a cure. Sympathetic ophthalmia is better known. The best treatment would be better supervision in the workshop. It is easy and worthwhile to suggest measures for improvement. To have them enforced is better, but how much more difficult.

The second half of life brings other dangers. Glaucoma is one of the first. It begins to be frequent around fifty but it may appear earlier. It develops unnoticed and without pain, at first slowly, so slowly that in too many cases the person affected does not go to his physician until too late. Out of 100 persons around fifty years of age who come to us because of trouble with their vision, at least one is affected by glaucoma. In a recent

number of "Le Journal d'Ophthalmologie Sociale," dedicated to that question, it appears that 10 to 15% of the cases of blindness are due to glaucoma; many could have been avoided. It is important for the treatment of such a serious disease that doctors, social workers and the patients themselves be aware of the danger so that its discovery may be systematically followed up. One must think of it in connection with patients, apparently healthy, who come to us only for the choice of glasses. The treatment once prescribed, our social workers should make sure that it is followed. It is with this idea that hospitals for glaucoma have been created in the U. S. where the prophylactic method of which I have just told you the principal points is applied. The results are encouraging.

Then comes the age of cataracts. With old age, their frequency increases. Out of 100 persons aged 65 or more who consult us because of trouble with their eyes, opacity has begun and crystalline is at least to blame for 5 of these cases. One can sometimes stop it. Without doubt when the operation becomes necessary it is not to be feared; it is done today with an almost certainty of success. But all cataracts do not present the possibility of a successful operation, and every surgical operation carries some risk, however slight.

With arterial hypertension and the vascular lesions which go with it in the base of the eye or in the optic canal, even before real old age, we find another source of serious trouble. In this instance also one should not speak too authoritatively, but the number of cases of blindness which can result from it seem to be about 1 or 2 per 10,000 persons of that age.

From the age of 80, causes of blindness become more frequent. All the above mentioned diseases may occur, but they will be more threatening on account of age. Even the removal of a cataract may cause anxiety to the patient or his family and hence be postponed or entirely given up, which may result in complete or at least partial blindness. Vascular diseases become more frequent and very often degenerative lesions of the retina make reading impossible and to many persons this means blindness.

An eye is not made to live one hundred years especially in view of the functions we demand of it, as its elements cannot be renewed, and like the body, it is growing old. From the age of 90 the rate of blindness, at least relatively, is very high. To the causes we have already encountered, we must add certain diseases which may become manifest at any age. Diabetes should be detected at the beginning and never neglected, as it seems that its slight form is the worst threat to a person's vision.

Myopia is often regarded as harmless and hence the optician's help is considered as sufficient. Yet it is the cause of 10 to 12% of blindness. Usually this does not apply to slight myopia which can be improved with glasses, but to other more serious cases when the back wall of the eye becomes affected. Myopia is then the result of these lesions, which, ignored until recently, constitute the cause of the disease. Trouble of vision is accessory; this notion should be spread.

In discussing here the extent of blindness in various areas of the world, I had particularly in view the countries where census is possible and numerous ophthalmologic services are available. The results will serve as a basis, as diseases causing blindness exist everywhere. But we should not forget the other parts of the world, where different conditions make the situation still worse. There, too, prevention of blindness will be enforced in a different manner. Mr. John Wilson will tell us about it. Trachoma, existing especially in many countries along the Mediterranean coast and way down to the center of Africa, acute conjunctivitis in the northern part of that Continent, onchocerciasis, particularly in Central America and in Africa, small-pox, vitamin deficiency—all these diseases constitute new or most frequent causes of blindness and can be added to those diseases with which the more privileged countries are already stricken. They should not be forgotten just because they do not concern the privileged nations. Mr. J. Wilson will tell you about it. There will always be many blind people in the countries where trachoma maintains its real frequency. So long as an infected mother will let her contaminated tears fall on her nursing child's eyes, so long as parents will wipe their child's face with dirty cloths, so long as flies will settle on a child's eyelashes, so long as physiological misery will exist, trachoma will not be stamped out.

Small-pox, if not fought against, will always cause blindness. If syphilis has kept its former virulence, it will cause blindness. But fortunately we can affirm now, and Mr. Wilson will give us further proof of it, that action against that disease is well started. Trachoma, against which an energetic fight is going on everywhere, is in regression now. Although the day when it will disappear is not near yet, at least this most menacing scourge is in retreat in all countries. The medical treatments used are better and its frequency and severity are diminishing.

Onchocerciasis, formerly almost unknown and the origin of which is now disclosed, as well as its transmission, will undoubtedly disappear in the countries where this affection exists, and likewise leprosy which is so dangerous for the eye.

It is certain that the causes of blindness are decreasing in

all countries and it is comforting to us to say it again. There will always be blind people, there are less now, there will be even less in the future. The majority of eye affections are strangled nowadays by antibiotics, glaucoma is detected at an early stage and there are more ways and better methods to stop its development. Detachment of the retina, which I did not mention as nowadays it seldom causes blindness, was only thirty years ago the cause of many cases. The Gonin operation has fought it down. Cerebral tumor, considered not long ago as dangerous for life and vision, is often cured now thanks to the progress in neurosurgery. The operation for the cataract is also being improved now, and its consequences are less damaging if antibiotics are used. Syphilis at its severe stage is less frequent in all those countries where a fight against it has been started. Ophthalmia of the newly-born, which was a real calamity in the past, soon will not claim any victims and its delayed consequences, i. e., scars which have caused corneal opacity, have been largely abolished due to a grafting in the cornea. Many blind people were thus cured. Thus progress made in hygiene and in social assistance, as well as in medicine and ophthalmology, has put an end to a number of causes of blindness. Some will always remain as they are inherent in nature and in human weakness. But although progress in medicine alleviated so many miseries, it created at the same time many new causes of blindness, a fact which may sound paradoxical.

We have clearly shown how, with the advance of age, blindness becomes more frequent and what dangers menace an old person's eyes. Longevity is increasing. There are more old people and tomorrow there will be still more. By curing the pulmonary infection with antibiotics, does not the physician promise to turn us into centenarians? Does this prospect mean progress? Will it be good by prolonging life to condemn man to an existence often slackened and deprived of hearing or vision? Let us just note: to prolong life is to make more blind people

Neurosurgery, which is so beneficial, removes the cerebral tumor and permits life to continue. But it does not always restore sight, so that in some instances, by saving life, it makes more blind people.

Meningitis, which has been mortal in a number of cases in the past, can be cured now, but its after effects are often dangerous to vision. One can be cured of the disease but remain or become blind.

There is another affection which causes blindness almost inevitably and which is the result of the fine progress made in medicine. It is the retrolental fibroplasia of premature babies.

Babies born a few months before their normal time did not survive in the past. Now, due to perfect technical interventions, their life is often saved, but very often too they become blind. Fibroplasia affects a great number of premature babies, but fortunately the methods employed for saving their lives are ever improving. Tomorrow this affection, against which we are helpless now, will become rare, as its origin will be better known.

I have tried to show the role of ophthalmology and medicine in prevention of blindness. By comparing the results obtained today with those of our predecessors some hundred years ago, one is not surprised to see that blindness has become rarer, and one can understand that it may become even more rare.

Prevention of blindness should nevertheless expand its activity beyond the progress in medicine. But the task is not only medical, it should also have a social character. Mr. John Wilson will tell you about it better than I. It should be the program of an organization like the International Association for Prevention of Blindness, to attempt to find the causes, to make people aware of them and of their dangers, to fight against certain prejudices, to create groups of specialized assistants, to increase sight-saving classes which enable a child whose vision is handicapped to pursue its instruction without danger, to stir public powers, to draw their attention to so many causes which could be avoided—such must be the objectives of any organization for prevention of blindness. This is what our magazine on social ophthalmology, organ of our International Association, is trying to disseminate. In order to render its activity really effective it should penetrate everywhere, but for this we need some means. We are looking for them, are we going to find them some day?

Blindness will continue to be one of those evils of which the human race will never rid itself. We are persuaded that there will be fewer blind people, but we are also certain that if we make an attempt, we could lessen those sufferings which are caused by blindness. Such is your noble task. In order to better help the blind, we should first get to know them well, to have closer contacts with them, to watch their progress at all stages of their life, to have talked with those who seemed crushed by their affliction and with those who have regained hope in seeing and hearing—those outstanding men whose blindness did not diminish but rather increased their strength of personality.

It is erroneous to speak of the darkness in which the blind live, but people will continue to speak of it, as it is easy to say. The darkness does not exist for a blind man with an inner light. Let us help him to keep this light still brighter, even though it is so different from ours.

PREVENTING BLINDNESS IN UNDERDEVELOPED TERRITORIES

John F. Wilson, Director, British Empire Society for the Blind,
London, England

Not long ago in a remote part of Africa a small school for the Blind was started. A Committee of humane people was formed, funds were raised and some thirty blind children were soon enrolled. The nearest eye clinic was hundreds of miles away, and so the Committee accepted these children without medical examination. Two years later the school was visited by an eye surgeon who found that two-thirds of the children suffered from eye defects which, at some stage, could have been cured. By comparatively simple operations he restored sight to nine of the children.

I have told this story to illustrate that in the less developed territories you cannot deal effectively with the problem of blindness merely in one of its aspects; medical and welfare services must work together if they are to work at all. In that respect the situation is different from that in more advanced territories where blind welfare owes much of its vigour to the fact that it developed as a highly specialized service, operated by distinct agencies with distinct techniques, and related only indirectly to medical work. That is reasonable enough because in countries with advanced medical services the causes of blindness are well known. Registration of blind people is usually preceded by competent certification and because it is a fair assumption that a person would not be blind if it were possible for him to see.

These assumptions are not valid in the less developed territories where possibly four-fifths of the world's blind population lives and where work for the blind is now growing at a remarkable pace. In most parts of Africa and Asia, for example, the medical causes of blindness—and the social causes behind the medical causes—are known only in general terms; scientific certification of blindness is rarely possible; blind welfare organizations have to care for great numbers of blind people whose sight could at some stage have been saved. We often say in our International Conferences that blind people everywhere have a right to the education and training which will fit them for active citizenship. Should we not add that a blind man has the prior right to get his sight back if that is humanly possible. Prevention is not only better than cure; it is also better than rehabilitation.

The opposite danger is that blind welfare might be treated merely as a medical after care service or, even worse, that the development of work for the blind might be postponed until

adequate preventive services exist. We have every right to oppose such policies, not simply because our own specialism is at stake, but also because they are unjust and unsound. Blind welfare as we know it today is no more ancillary to ophthalmology than education is ancillary to obstetrics. A civilized community will recognize that it has a distinct obligation to give constructive help to its blind members, and surely that obligation is increased rather than lessened if some of the blind people concerned need never have lost their sight.

We talk of the prevention of blindness, but what do we mean by it. It is not simply the province of the eye specialist, for many eye defects are complications of general diseases such as small-pox, measles, tuberculosis, leprosy. Nor is it simply a matter of doctors, clinics and hospitals; a new sewer or reservoir might do as much as a new hospital to reduce the blindness rate in a tropical town. Often the chain of causation is long and entangled. An African comes to a clinic with his eyes damaged by ingrowing eyelashes. Trachoma caused the eyelashes to turn in, but what caused this man to have trachoma? Possibly he comes from a village where flies, which carry the disease, breed prolifically because the people keep cattle. If, as well as cattle, the people can be induced to keep chickens—which eat the larvae of the flies—the trachoma rate might be reduced. And so your prevention of blindness campaign gets itself involved in the poultry business. Lest that should seem a fanciful example, let me say that that is exactly what happened some years ago in Central Tanganyika. Sometimes the search will lead you into the dark realms of superstition and taboo or down to the basic foundations of their country's economy—nutrition, agriculture and productivity.

You can think of it as a pyramid: at the pinnacle the eye specialist with his Clinic. At the next level the General Medical Service, the Public Health Organizations. Below them Mass Education, Public Works, Pest Control and the Agriculturists and, at the bottom, the potential next generation of blind people—that cross-section of ordinary people with their habits, their way of life and their beliefs. At what level in this pyramid can we, whose work it is to care for the blind, make an effective contribution?

That question has already assumed importance in the under-developed territories where, in order to deal effectively with blinding diseases which menace whole communities, all the available skills of science and welfare have to be mobilized. Such an effort is now being made in the British Colonies and may be of interest both because of its scope and because it was

initiated by an organization for the blind. The story began four years ago when, after an extensive investigation by the British Colonial Office and the Royal National Institute for the Blind, the British Empire Society for the Blind was formed with the support of all the Colonial Governments. The task was formidable for, in the forty-five territories concerned, upwards of a million people were blind, mainly as the result of preventable disease. The Society was empowered to tackle the problem comprehensively but by reason of our previous experience we were inclined to think mainly in terms of an education and training program and to say that the task of preventing and curing blindness should be left to Governments.

Closer acquaintance with the facts soon convinced us that this policy was wrong. Possibly four-fifths of all the blindness in the tropics is preventable, but that fact had never been presented to the public in terms of human suffering and economic loss. Considerable funds were needed for research, prevention and welfare, but in the face of competing claims these funds could not be obtained until the priority of the need had been established after thorough going ascertainment leading on to a precise plan of action. Surprisingly little is known about the extent and causes of blindness in the underdeveloped territories, and it is understandable that Government should under-estimate the problem until it is brought forcibly to their attention.

And so we decided, whilst proceeding with a basic scheme of blind welfare in each territory, to promote a series of medical surveys. The two major surveys—in West and East Africa—are now in progress, and two smaller investigations have been undertaken in Arabia. When the major surveys are completed two years from now we shall, for the first time, have an authoritative picture of the extent and causes of blindness over a considerable area of tropical Africa.

The West African Survey, being conducted amongst a population of some twenty millions in the Northern Gold Coast, Nigeria and the Cameroons, is probably the most ambitious project of its kind ever undertaken. It consists of an ophthalmic team, equipped with a mobile clinic and laboratory and an entomological unit which is conducting research into onchocerciasis, the dreaded River Blindness. Last year these two teams concentrated on the focus of this disease in the Northern Gold Coast and revealed the appalling fact that four per cent of the million African inhabitants of the region are blind, and that more than half the population suffers from onchocerciasis.

This part of Africa is locally known as "The Country of the Blind" and the conditions in some of the villages, where a tenth

of the inhabitants are blind, are like a gruesome piece of fiction. A tiny river fly carries the disease, and we are studying its life and breeding habits in an effort to find an effective means of destroying it. In the Congo, in East Africa, and in Central America, where the disease also exists, striking results have been achieved by spraying rivers with insecticide, but a successful method of eliminating the pest over a vast area of intermittent streams has not yet been demonstrated. Some authorities have predicted that this disease might spread with devastating effect as the inhabitants emigrate from the infected areas and as hydro-electric schemes change the flow of whole river systems. If, through combined research by many organizations, a solution can be found (and there is good reason to believe that it can) scores of thousands of people can be saved from blindness, and a burden of misery and loss can be lifted from communities which have come to regard blindness as normal.

Less dramatic than onchocerciasis but immensely more widespread are trachoma and the various forms of conjunctivitis. In our area they appear to be responsible for more blindness and poor sight than any other combination of diseases. They are at their worst in the arid lands of the Middle East where trachoma was first identified by Egyptian medical men more than 3,000 years ago. Recently high infection rates have been recorded in parts of Africa formerly believed to be comparatively free of trachoma. In Kenya, surveys have indicated that half the tribesmen have the disease and in selected schools along the East African Coast more than a third of the children were found to be infected. In parts of Aden and probably throughout Arabia there are villages where everyone has trachoma.

The World Health Organization and various Governments are tackling this problem energetically. An expert Committee of WHO has concluded that with a combination of new drugs most cases of trachoma can now be cured. Mass treatment is possible, but in the expert's view it is likely to be effective only where there exists a permanent network of treatment centres covering the whole endemic area. That would mean an expansion of medical services, which is hardly within the capacity of many of the countries worst affected by trachoma. The great effort which will be required may not be politically practical until it has been demonstrated that the cost of controlling this scourge is small by comparison with the cost of permitting it to go on reducing the efficiency of millions of workers.

Blind lepers are a familiar and pathetic sight in most of the territories in which our Society is working. Blindness is an indirect result of certain types of leprosy in their advanced form

and, though the statistics are not available, it is likely that there are some thousands of blind lepers in Africa, Asia and Central America. One of the most remarkable miracles in the fairy tale of modern science is the development of the sulphone group of drugs as a cure for leprosy. These drugs cannot restore sight but they can cure most cases of leprosy and, if taken in time, can arrest the development of eye complications. Already the amount of blindness amongst new cases in leper settlements is but a small fraction of what it was ten years ago. But the success of the treatment has produced a new welfare problem, for nowadays there are many cured blind lepers who have to remain in the settlements simply because no adequate facilities exist for them outside. Often the disease causes disabilities in addition to blindness, but the problem of rehabilitation is certainly not more difficult than that of dealing with other multiply-handicapped blind people. We were able to do little for these people in the past, but we should be able to help them effectively once the reason for their segregation has disappeared. Possibly this question could be investigated by the World Council for the Welfare of the Blind in consultation with international leprosy organizations.

If it were possible to know how many people are blind whose sight could be restored by simple operations, the figure would probably be horrifying. Reports from India and China, and our own experience in the British Colonies, show that an astonishing number of people are blinded by cataracts which could easily be removed, or are going blind through glaucoma or entropion which would respond to simple surgery. Each year more eye surgeons are trained, but that is an expensive and slow process and by this means alone we shall not come near to solving this problem in the foreseeable future. Laymen may perhaps be forgiven if they occasionally wonder whether this whole subject has become too specialized. Where eye surgeons are not available could not much greater use be made of the general practitioner or even of trained ophthalmic orderlies in dealing with conditions which do not demand advanced, specialized skill. A few eyes might be destroyed through wrong diagnosis or inexperienced treatment, but surely a far greater number would be saved. The ophthalmic orderly in his jeep can never be a substitute for the eye surgeon in his clinic, but he is certainly better than nothing, and the conditions for successfully using mobile eye dispensaries have already been well demonstrated in Egypt, India and elsewhere.

Better medical services are only part of the answer; people have to be induced to use these services to the best advantage, and to practice better hygiene to forestall the need for treatment.

Behind most of the medical causes of blindness in the under-developed territories lie the social causes—ignorance, squalor and poverty. An eminent eye surgeon recently returned from a trachoma ridden area told me: "We are attacking trachoma in the clinics with aureomycin, but we should be attacking it in the homes with soap and water."

People the world over do not take their eyes seriously enough, and often seek treatment only when it is too late. Much can be done by medical propaganda, and it is in this direction that organizations for the blind can and do give most effective help. Some excellent prevention of blindness films have been produced for sophisticated audiences, but there are surprisingly few dealing in a simple way with trachoma, conjunctivitis and the basic rules of eye health in a primitive community. It would be a considerable step forward if some international agency would take up this matter of the production and distribution of films, posters and pamphlets.

We have to contend not just with ignorance, but also with superstition and harmful practices. In Tanganyika the authorities ascribe much of the high incidence of blindness to the use of an eye salve made from poisonous berries. In the Luapula Valley of Northern Rhodesia it is reported that there are villages where an eighth of the children are blind mainly through the traditional use of a noxious preparation on the eyes of children suffering from measles. There is a widespread practice in Africa of using, as a supposed cure for eye inflammation, a stringent powder made from certain snail shells and, oddly enough, malicious people use the same powder to blind their enemies. There are many crude forms of eye surgery, of which the most sophisticated is couching of cataract, which is widely practiced in Asia but also occurs in Arabia, Africa and even the West Indies. Medical anthropologists are gathering a wealth of information about these practices in the conviction that to control them you must first understand their origin and the philosophy which fostered them.

Our theme in this conference is the New Horizon and in the medical world of marvelous discovery you can see that horizon beckoning with all its promise and wonder. But how far away is that horizon and how difficult is the country between. The new drugs and scientific techniques point to a future in which it would be possible to control diseases which now blind millions of people. In countries with advanced medical services the results are already noticeable but in the less developed territories the effect will be much slower. The spread of the benefits of medical science is seldom dramatic and sudden; its pace is controlled less by the swiftness of discovery than by the gradualness of assimilation.

The revolution in medical science has offered an unparalleled opportunity. Before the opportunity can be grasped by the multitude of the people, there must be a corresponding revolution in medical services and in the machinery of mass distribution. We in this conference have our part to play in forming the public opinion which could make such a revolution possible, for until it takes place it is we, in our schools and training centres, who must carry the pathetic burden of unprevented blindness.

DISCUSSION

MR. WILSON (UNITED KINGDOM) suggested that the Council should investigate services to blind lepers and also the possible provision of films on treatment and prevention of blindness for showing to primitive audiences. PROF. MEZA (MEXICO) reported on the action being taken to combat blindness in Mexico, Guatemala and Venezuela. CAPT. DESAI (INDIA) proposed, and agreed to draft, a resolution calling on the World Health Organization and other international agencies to launch prevention programs in underdeveloped countries. In reply to a question DR. BAILLIART (FRANCE) described some of the problems surrounding the prevention and cure of retrolental fibroplasia. In answer to another question MR. WILSON (UNITED KINGDOM) expressed the view that it would be most helpful for practitioners and nurses working in underdeveloped areas to receive training in simple measures for treatment of eye defects and prevention of blindness. SR. PARDO OSPINA (COLOMBIA) stated that outside of a few mobile units in his own country, services for the prevention of blindness are almost non-existent throughout Latin America. He appealed to the World Council to extend aid to the 400,000 blind people of that region. PROF. VEIGA (BRAZIL) reported that in Brazil the state of Sao Paulo has a law requiring the treatment of the eyes of newborn babies. MR. IWAHASHI (JAPAN) reported a decrease in blindness from leprosy in Japan. However, there still remain in his country 14,000 lepers of whom 11 percent are blind. He requested the Conference to extend aid to help alleviate this problem. SIR CLUTHA MACKENZIE claimed that according to the latest figures, the incidence of blindness in India is 500 per 100,000 of the general population. He quoted medical authorities to support the belief that the number of blind persons in primitive countries can be reduced by giving basic instruction in the prevention of blindness in schools. DR. VAN SCHALKWIJK (SOUTH AFRICA) reported that such an educational program is being introduced in South Africa. In addition, there are mobile units which travel throughout the country giving treat-

ment and instruction in prevention of blindness. M. GUINOT (FRANCE) asked if it would be possible for doctors to prepare a practical definition of blindness. MR. SHAH (INDIA) reported that there are two million blind people in India, and asked the Conference to advise the government on how to improve its current program of services to the blind. The Chairman expressed the view that the Conference should not address individual governments, to which Mr. Shah agreed.

RESOLUTION I

The World Assembly of the World Council for the Welfare of the Blind, recognizing the vital need of services for the prevention and cure of blindness and being eager for the emancipation of blind people throughout the globe and recognizing the fact that with the best of intentions the underdeveloped countries of the world will not, in the absence of expert technical guidance and financial resources, be able to further the prevention of preventable blindness or the cure of curable blindness or the welfare of the blind, recommends that the United Nations and the specialized agencies, including ILO, WHO, UNESCO, UNICEF, and the expanded program of Technical Assistance, be urged to extend free technical assistance and adequate financial aid to the underdeveloped countries to further their blind welfare activities, and that all nations be urged to vigorously pursue campaigns of public education concerning the needs of the blind and to give such needs adequate financial support.

FOURTH SESSION Saturday Morning, August 7, 1954
A DEFINITION OF BLINDNESS—
ITS BASIS AND PURPOSE

Chairman: Gerard Borre, President, Ligue Braille, Brussels, Belgium

Our program committee has honored me with the chairmanship of this meeting devoted to the definition of blindness, its basis and purposes. This is a problem of paramount importance on which depends the efficiency of all legislative and private measures taken in favor of the blind. It was for this reason that, at the conference held at Oxford in 1949, the first resolution required that in all countries a definition of blindness should be established. In March, 1950, *THE OUTLOOK FOR THE BLIND* published an article by Dr. Geffner in which he denounced a tendency, on the one hand to write off the visual capacity of the partially seeing as an insignificant factor, and on the other to minimize the importance of the limitations imposed by blindness, thus creating the impression that the sightless are more or less on a par with the partially seeing.

The resolution concerning a definition of blindness adopted at Oxford has been the object of thorough studies by the United Nations and such specialized agencies as the World Health Organization, the Technical Working Group on the Rehabilitation of the Physically Handicapped, the International Labor Office and UNESCO. From their conclusions it appears that the definition of blindness adopted in the big western countries are invaluable in the underdeveloped areas.

In June of this year, the Pan-American Conference on the Welfare of the Blind adopted a resolution in accordance with the conclusions of the specialized agencies of the United Nations.

Today it is the task of the World Council for the Welfare of the Blind to formulate a definition of blindness which all countries should consider as the minimum definition desirable and which should be implemented as soon as possible. The papers which are submitted for your appraisal today, and which have been prepared by highly competent individuals, will make it easier to accomplish your difficult duty.

***HOW SHOULD BLINDNESS BE DEFINED
 IN THE TWENTIETH CENTURY**

**Ernst Jorgensen, Social Affairs Officer for the Blind, United Nations
 Division of Social Welfare, New York**

In presenting this paper to the World Assembly of the World Council for the Welfare of the Blind, it is hoped that it will serve as a useful basis for the discussion of this subject. The United

* In Absentia.

Nations looks forward to receiving the guidance of the World Council, which will be of great value in preparing final recommendations for an international definition.

The main purposes of a definition are:

- (a) to ensure that all persons whose visual handicap is so great that they are in need of special services, have equal right and access to such services;
- (b) to ensure that persons not entitled to such services do not benefit from them, and are not wrongly treated as blind; and
- (c) to make possible, when programmes for the blind are being established, assessment of the magnitude of the problem.

In discussing the possibility of working out an international definition of blindness, the United Nations Social Commission has stressed that consideration be given to already existing definitions, and emphasis was given to the necessity of making the definition flexible.

Existing definitions range from counting only the totally blind to recognizing those persons who have 1/10 of normal sight as blind. Taking into account the demand for a flexible definition, and considering the influence which differing conditions may have on the needs of the blind, it seems impractical to settle on one definition as being acceptable to all persons for all purposes everywhere. For this reason, it might seem preferable to establish a minimum definition, subject to general agreement, with the understanding that countries will review this definition from time to time in the light of developing conditions, and will supplement or replace it with the definitions needed in respect of particular services.

It would not be just to the visually handicapped to accept too low a definition as a basis for a minimum standard. Nor does it seem reasonable to expect that the broadest known definition should be acceptable to all. It might, therefore, seem advisable to consider the possibility of international agreement that persons having no more than 3/60 of normal vision with the best correcting lens, or suffering some impairment of sight (i. e., limitation in the field of vision) that decreases its practical value to the equal of 3/60, should be entitled to all facilities offered to blind persons.

In order to make this definition usable by lay persons working in the field of blind welfare, a generally agreed interpretation into methods of simple measurement, as, for instance, the counting of fingers at not more than three metres' distance, should also be established. It will, however, always be considered

necessary to have such lay judgment checked by ophthalmologists.

When this definition was brought to the attention of the Government of Egypt, it was found that although the possibility of accepting it might be considered at a later stage of development, the Government is unable at present to take responsibility for persons with more than 1/60 of normal vision. This example shows that an immediate acceptance of the definition of 3/60 cannot be expected in all countries, and that for the time being it must be regarded as only a goal towards which all countries, which may not as yet have reached it, should strive.

This being the case, it might well be questioned why a higher definition than 3/60 might not as justly be proposed as an aim for international agreement. This does not seem advisable, for reasons of which the most important are:

- (a) The more liberal definitions may seem too unrealistic to countries which now count only the totally blind, and even within this limited definition have a very high incidence of blindness.
- (b) The more liberal definitions may, in some instances, encompass persons whose impairment of sight is not the major cause of their disability. They may be emotionally disturbed or mentally retarded, etc., and should be treated for these defects rather than for blindness.
- (c) The United Kingdom, which must be considered among the more highly developed countries, has for a long time, and still bases its blind welfare work on the suggested minimum definition of 3/60.

The above-mentioned minimum definition is suggested as a target for those countries which have at present a less liberal definition of blindness, and it is not intended to induce countries with a broader definition to adopt a narrower one. It might be suggested such countries would wish to confirm their willingness to maintain their present definition and not change it unless long experience proves it advisable to do so.

In order to stimulate action and to keep informed of the steps taken to reach the proposed target, it might be suggested that all countries should report at intervals to the United Nations Social Commission or some other international authority on the definitions in use, noting the changes that may have occurred. Through such reports it should be possible, at a later stage, to reconsider the question of an international definition of blindness.

DEFINITIONS OF BLINDNESS

AUSTRIA	Children with vision 1/60 accepted for admission to Institute for the Blind, Vienna. Adults: 1/25 normal vision, or vision economically worthless.
BELGIUM	A blind person is one whose vision in the better eye is reduced to at most 1/20 of normal.
BULGARIA	Children: Those unable to benefit by education in schools for the seeing. Adults: Those having visual acuity less than 1/10. Certification of blindness must be made by two Government ophthalmologists.
CANADA	6/60 in the better eye after correction, or subject to higher visual acuity allowance where field is limited or eccentric and limited to an angle not exceeding ten degrees. (Dept. of National Health & Welfare and Canadian National Institute for the Blind.)
DENMARK	Children: Those who are unable to benefit by education at schools for the seeing. (Ministry of Social Affairs) Adults: Visual power not more than 4/60, or if greater, having other vision of no practical value. (Definition for blind persons wishing to benefit from membership of the Dansk Blindesamfund.)
EIRE	Persons so blind as to be unable to perform any work for which eyesight is essential, or unable to follow their ordinary occupation. (Department of Social Welfare. Used by local authorities.)
EGYPT	Any person unable to count fingers at a distance of one meter is considered as blind.
FINLAND	Children: Children unable to read print are received in schools for the blind. Adults: Adults are blind who cannot find their way in unfamiliar surroundings. Medical evidence of blindness required before special allowances are given.

FRANCE

Children: As for adults, but education in school for the blind may be arranged even if sight at the time exceeds 1/20, if prognosis is bad.

Adults: Those with no central vision, or vision less than 1/20 normal. (Definition required by Ministry of Health, as condition of receiving assistance under Ordinance of July, 1945, in order (a) to promote prevention of blindness, and (b) to ensure that only the blind benefit by legislation in their favour.)

GERMANY

Children: Children are blind who have visual acuity less than 1/25, so that education by sighted methods is impossible, or who later are likely to be so blind that training in work for which eyesight is essential will not be possible.

Adults: Adults are blind who cannot find their way unaccompanied in unfamiliar surroundings, or whose visual acuity is 1/50 to 1/25, or who cannot count fingers at 2 metres. Even when vision exceeds 1/25, if there is a serious limitation in field of vision or nystagmus or night blindness, a person is considered blind.

In Bavaria, as the blind receive a yearly stipend, the definition of blindness is more restricted and only those are considered blind whose visual acuity is 1/100 or less.

HUNGARY

Those unable to count fingers at one metre. (Accepted by the Union for the Blind.)

INDIA

Only total blindness is recognized.

ITALY

Children: Children unable to follow teaching in ordinary schools are accepted in schools for the blind.

Adults: No universally accepted definition of blindness. Pensions to war-blinded granted to those unable to count fingers at "reasonable distance." The Italian Union for the Blind regards persons with 1/10 vision as blind, and Industrial Insurance also accepts this. We are also informed that the following is used: A person is considered blind who is no longer able to distinguish fingers at one metre's distance. The artisans of skilled crafts are considered blind when they are no longer able to exercise a professional activity relying upon the use of vision.

LUXEMBOURG
 No official definition of blindness. Persons are recognized as blind when the reduction of visual acuity is such that the assistance of another person is necessary.

MEXICO
 In addition to total blindness, which does not need to be defined, and professional blindness, which varies with the different professions, economic blindness is recognized as the incapacity to engage in any kind of work, industrial or otherwise, for which sight is essential. In general, visual acuity less than 1/10 has been classified as economic blindness, or a similar disability caused by reduction of the field of vision.

THE NETHERLANDS
 Children: Those who cannot use printed textbooks are accepted in schools for the blind.
 Adults: No officially accepted definition, but adults having only 1/20 visual power (or having more than 1/20, but with very limited field of vision) are regarded as blind.

NORWAY
 Children: No official definition, but in practice, medical practitioners decide when children should be admitted to State School for the Blind.
 Adults: Persons are blind whose sight is such that they cannot find their way, or cannot count fingers at more than one metre. (Law of 16 July, 1936.) Medical Directorate of the Social Department decides whether an adult applying for blind pension comes within the definition.

Unable to count fingers at one metre.

POLAND
 Those who have less than 1/10 vision (Wecker). (Definition for Accident Insurance).
 Those who cannot count fingers at one metre. (Admission to Organizacjon Nacional de Ciegos.)

SPAIN
 Children: Those who cannot profit by teaching in ordinary schools.
 Adults: Persons with visual acuity less than 3/60, and if proved incapable of traveling alone in an unfamiliar environment.

SWEDEN

SWITZERLAND

No official definition of blindness, but Swiss Federation regards as blind those unable to do work requiring sight.

**UNITED
KINGDOM**
 England
 Scotland
 Wales

Children: Those who have no sight, or whose sight is, or is likely to become, so defective that they require education by methods not involving the use of sight. (Education Act of 1944.)

Adults: So blind as to be unable to perform any work for which eyesight is essential. (National Assistance Act of 1948). Persons with over 6/60 (Snellen) not blind, and with less than 3/60 (Snellen) blind. With vision between 3/60 and 6/60, they may be classified as blind or not blind, according to fullness or restriction of the field of vision.

**Northern
Ireland**

Children: Those unable to derive benefit from teaching in ordinary schools.

Adults: Those unable to perform any work for which eyesight is essential. (Prescribed by Ministry of Labour and National Insurance.)

**UNITED
STATES**

Visual acuity not exceeding 20/200 (Snellen) in the better eye with correcting lenses, or visual acuity greater than 20/200, but with limitation in field of vision such that the widest diameter of visual field subtends angle no greater than 20 degrees.

URUGUAY

A person is considered socially blind who cannot count fingers in good light at a distance of more than one metre.

***DEFINITIONS AS THEY ARE NECESSARY TO AND AS THEY AFFECT EDUCATIONAL SERVICES TO BLIND CHILDREN**

Dr. W. D. Wall, Specialist in Education of the Handicapped, UNESCO

Clearly definitions of blindness as they apply to special education for blind children must in practice take account of two factors:

- I. The amount of special educational provision available for blind children in proportion to the number of those who can profit by it;
- II. The availability of special provision for children who, not totally blind, yet have grave visual defects.

Both these factors are intimately bound up with the level of economic and social development achieved by any given country and, within that, with the way and extent to which the general educational system, including special educational provision, has developed. Outside Europe and North America practically no country has sufficient, and sufficiently differentiated, provision for all its blind, partially blind and partially sighted children. Even where relatively complete provision is made in Europe it is rarely sufficient to cover the whole range of educable capacity to be found in blind children of compulsory school age, ranging as it does from severe mental subnormality to outstanding intelligence. It will be noted from Mr. Jorgensen's paper that most countries adopt either quite arbitrary standards applied ad hoc in terms of current possibilities or rough definitions such as vision of 1/60 or less, coupled with considerable flexibility in deciding about borderline cases.

It is doubtful whether anything more than this could or should be established in the way of a definition for educational purposes. The determining factor is that of how a child is likely to achieve the fullest possible personal and educational development in spite of his handicap, and what is the outlook for him in terms of sight and sighted methods. For example a partially sighted child whose sight is likely to deteriorate, clearly should be taught to read Braille if he is intellectually capable of it. Whether however his education should proceed wholly or partly in a school for the totally blind or in a school for the partially blind will depend upon the facilities offered and the methods adopted by the schools available.

As with the education of any other kind of handicapped child therefore, definitions can only be a partial guide; and their principal value is that of enabling an estimate to be made of how many school places of different kinds should be provided

to meet the needs of children in any given country or community.

Within the total group of blind children—that is among those who have to be taught by methods appropriate to those who have no effective sight for educational purposes—we can distinguish a number of subgroups with definable special needs which require special provision. In practice in certain European countries, special schools or classes have developed for the following (in addition to the “normal” group of blind children):

(i) The blind who have *other handicaps of educational or psychological importance*:

- subnormal intelligence
- severe physical handicap
- marked emotional disturbance
- a severe degree of deafness
- aphasia.

(ii) The blind whose *intelligence is above average*, who can follow a higher secondary course and eventually enter one or other of the professions

The number and indeed the very existence of such schools—and possibly corresponding ones for partially blind and partially sighted children—will depend upon the recognition that such groups exist; upon finance, public or private, and upon the numbers of children found in the particular subgroups. For example, in England, one school for blind children with physical or mental handicaps exists with about 60-70 pupils, and having attached to it a deaf-blind unit for 3-4 children. One boys’ and one girls’ grammar school exists for the abler children after the age of 11-13.

The procedures used in the placement of blind and partially blind children in appropriate schools are much more important than definitions. Here we might insist upon the need for careful examination and appraisal of each individual case. The information considered should include, as well as degree of vision precisely determined:

- (a) Prognosis—static, deteriorating, recoverable;
- (b) physical handicaps;
- (c) other sensory defects of educational importance;
- (d) emotional and social factors in the child, and his immediate family environment;
- (e) level of innate intelligence;
- (f) special cognitive capacities or defects as far as those can be determined;
- (g) previous educational history—if any.

Adequate placement can be made only on the basis of full consideration of such data and of a thorough knowledge of the

schools available. Clearly the gathering of the data, its interpretation and the decision made is a matter for team-work between psychologist, teacher, parent and ophthalmological specialist. Moreover placements should not be regarded as final once made, but should be open to periodic review.

To sum up:

(i) Any definition of blindness for educational purposes should be flexible and be regarded more as a means of estimating the amount of various types of provision necessary than as a standard by which children are accepted or rejected for education in schools for the blind.

(ii) Definitions when used in connection with individual children or groups of children should not be confined to purely visual criteria however accurately assessed. Even children who are clearly blind differ among themselves in so many ways that placement can be made effectively only if other factors—in the child, in his home life and in the school—are taken into account. In the case of the borderline group of partially sighted and partially blind, factors other than degree of vision, for example the prognosis of the visual impairment, the emotional stability of the child, his intelligence, etc., may well be decisive.

(iii) The placement of any child whether clearly blind or borderline should be made only after individual study of his precise needs by a multidisciplinary team and should be regarded as provisional. It should never be made simply in terms of a definition however carefully framed.

DEFINITIONS AS THEY APPLY TO ECONOMIC BENEFITS

George Card, First Vice President, National Federation of the Blind,
Madison, Wisconsin, United States

A definition should state the essential nature of that which is being defined, that is, should identify and encompass its principal elements. It is therefore elementary, if not tautological, to say that a definition of blindness as a determinant of eligibility for publicly or privately bestowed economic benefits should identify and encompass the principal elements of the economic handicaps of blindness. What are those elements? Do they consist of the medically determinable physical fact of blindness?

To some indeterminate extent, the economic handicap of blindness is an immediate consequent of the physical fact of blindness. There are, we all acknowledge, some tasks in a society organized for the sighted that are beyond the physical capacity of the blind to perform. Just what such tasks are, we are hard put to it to say. Every time we think we have discovered one we find a blind person doing it—Dr. Nast as an obstetrician; Profes-

sor Hanker as an electrical engineer; Dorothy Glass as a beautician; Dr. Burson as an experimental nuclear physicist. When one considers the occupations actually physically performed by blind individuals, when one adds to this that there are many tasks which are beyond the physical competence of innumerable people, whether blind or sighted, and, finally, when one contemplates the diversity and adaptability of the human animal—he is bound to concede that the list remunerative occupations which are foreclosed by virtue alone of the physical fact of blindness is very, very short indeed; and that the ordinary, run-of-the-mill blind person who has received proper orientation and training properly views the physical fact of blindness as merely a physical nuisance.

Moreover, measured in terms of the physical fact, the blind who are economically successful possess it no less than those who are not. In their cases, the physical fact is an economic irrelevance, and irrelevances should not be encompassed within the definition.

The physical impairment of blindness, therefore, is a minor element in the total handicap of blindness and an even more minor element in the economic handicap of blindness.

The economic handicap of blindness consists of two main elements: the misconceptions of the public, and particularly employers, about blindness; and the acceptance of those conceptions by the blind themselves. Somehow society has come to believe that competency varies directly with the degree of visual acuity, that blindness and helplessness are synonyms, that loss of eyesight is the same as loss of insight, the impairment of skills and abilities, the lost capacity to make decisions and to act responsively. According to this belief, the blind are completely impaired physically, permanently crippled psychologically and inevitably unbalanced emotionally. Consequently they are to be pitied, entertained, sheltered and custodialized. Services to the blind are cast in the mold of this stereotype. Even economic aid is founded upon it, for in most countries such aid is treated as a self-perpetuating way of life rather than as a stepping stone to independence and self-support. Defining blindness in terms of ophthalmic measurement, disease entities and visual tract impairment—the almost universal practice—is itself a manifestation and reflection of the stereotype.

To define blindness in this way is to attempt to define a social and economic problem in terms of medical examinations and diagnosis.

A definition of blindness identifying and encompassing the dominant economic elements might be formulated as follows:

Any person is blind who by reason of loss or impairment of eyesight or beliefs about it is denied equal opportunities of participation in society, particularly participation in the economic and social activities of society.

This more accurate definition of blindness will not of course by itself modify or obliterate the economic handicap of blindness. By recognizing and stating the essential nature of the handicap, however, the definition will be an automatic reproach to the stereotype and make clear what needs to be done in programming for the blind. It will thus be a start in the right direction rather than a compounding of present errors.

If the objection is raised that this definition is impractical and hard to handle, I can but reply that so is the economic handicap of blindness which it truly reflects.

DEFINITIONS AS THEY APPLY TO VOCATIONAL REHABILITATION SERVICES

A. A. Bennett, Manpower Division, International Labor Office
Geneva, Switzerland

In current usage vocational rehabilitation has a dual meaning. In one sense it is used broadly as a collective title to describe those services which are wholly or mainly vocational in character and which are necessary for the restoration of disabled persons to the working community; the main services thus covered are adjustment, vocational guidance, vocational training, selective placement and follow-up. On the other hand, it is also used to signify the successful outcome of the work of these vocational services; viz., the satisfactory resettlement of the individual disabled person in suitable employment.

The fundamental characteristic of the vocational rehabilitation of the blind is that all the vocational services necessary to restore them to the working community are based on the fact that their subsequent employment will be in occupations not involving the use of sight. Thus, while the same general principles of adjustment, vocational guidance, vocational training, placement and follow-up apply as in the case of sighted disabled persons, completely different methods and techniques have to be used to develop other sensory skills and habits to compensate for their loss of vision. This means, in effect, that special self-contained vocational rehabilitation services for the blind are necessary.

For example, adjustment and pre-vocational services are designed to restore the blind person's self-confidence, to give him the basic skills necessary in everyday life, as well as to give opportunities for trying out various general occupations not

involving the use of vision and to help in the choice of future employment. Vocational guidance services have more and more developed specialized psychological tests for the blind and aptitude tests for non-visual occupations to assist the vocational guidance personnel in giving sound advice. Vocational training of the blind is, of course, entirely based on non-visual methods. Subsequent placement in employment, whether in a specially selected occupation in competitive employment or in a sheltered workshop, or at home, must be considered completely from the non-visual point of view.

From the vocational rehabilitation point of view, therefore, the problem is to decide where to draw the dividing line between the special services for the blind based on non-visual methods and services for sighted disabled persons based on normal visual methods. The solution of this problem lies in the establishment of a suitable vocational definition of blindness. This is needed in order to determine what special vocational services are required for the blind, rather than as a measure for deciding whether or not any particular individual is to receive vocational rehabilitation services of a non-visual character.

Of the various national definitions given in Mr. Jorgensen's paper a little over half are based on ophthalmic terms while the remainder use less scientific language. Broadly speaking, the present stage of development of vocational rehabilitation services for the blind, and the extent to which employment opportunities have been found for the blind, in any particular country, are reflected in the scope and precision of its current definition. While there is some advantage in having an easily understood and usable lay interpretation expressed in simple terms, it would seem better for it to be an adjunct to a scientific definition expressed in ophthalmic terms. Only a few countries consider limitations to the field of vision; it must be conceded in this respect, that restriction of field of vision might well be as great a handicap to work involving sight as reduction of visual acuity.

It is essential, however, that the definition adopted should serve only as a guide and should be flexible enough to take account of the differences in physical ability, character, personality, experience, education, intelligence, aptitudes, abilities and interests between different individuals as well as the prevailing economic and social conditions, and current opportunities for the blind to be successfully resettled in suitable employment. The definition should above all be applied in the interests of the visually handicapped.

To recapitulate:

1. From the vocational point of view, a person should be

considered as blind if his visual handicap is such that he needs vocational rehabilitation services, and subsequent employment, of a non-visual kind;

2. While there should be a minimum definition of blindness, expressed in ophthalmic terms, accompanied possibly by a simple lay interpretation, this should serve only as a guide and should not be rigidly applied—the key-note of the definition for vocational rehabilitation purposes should be its flexibility so as to take into account individual needs and possibilities.

DISCUSSION

MR. BENNETT (ILO) expressed the gratitude of the International Labor Office and himself for the opportunity of participating in the Conference. MR. BOULTER (UNITED STATES) presented the following resolution on the definition of blindness adopted by the Pan-American Conference on the Welfare of the Blind and Prevention of Blindness.

The Pan-American Conference on the Welfare of the Blind and the Prevention of Blindness recognizes the great importance to blind persons of a clear definition of blindness. It also recognizes the difficulties involved in preparing a definition which will ideally meet the needs of all visually handicapped persons from the ophthalmological, social, economical, vocational, educational and recreational points of view. The experience of certain countries over a period of years has proven that a definition based on the degree of central visual acuity and the restriction of the field of vision has proven satisfactory in meeting the needs of their blind citizens. The Conference therefore recommends the following:

1. That a blind person be defined as one whose central acuity in the better eye does not exceed 10/200 or 3/60, Snellen Chart, or whose visual field does not exceed 20 degrees in its widest diameter.

2. That it is recognized that many persons whose visual acuity in the better eye does not exceed 20/200 or 6/60 have a severe visual handicap. It is strongly urged that a definition of blindness be extended to include such persons.

3. That governments of all Pan-American countries where no such definition of blindness exists be urged to pass such legislation.

4. That because of the vital importance of providing early service to blind individuals, governments are further urged to adopt legislation making it mandatory on physicians

and other health authorities to report all cases of blindness to the proper authorities.

PROF. BENTIVOGLIO (Italy) accepted Mr. Jorgenson's recommendation which is similar to the Pan-American resolution, but suggested that the definition "unable to read ordinary print books" should be applied for educational purposes. SR. PARDO OSPINA (COLOMBIA) and SR. ESQUERRA (SPAIN) supported the Pan-American Resolution. DR. NOUR (EGYPT) urged the acceptance of two or three separate definitions with reference to national tradition, blind population and local resources. M. GUINOT (FRANCE) considered that the definition should be based on limit of personal restriction. COMM. ISAAC (FRANCE) felt that 3/60 should be the accepted definition of blindness, but that special attention should be given to the totally blind. MR. COLLIGAN (UNITED KINGDOM) recommended that the three guiding principles in determining those eligible for services to the blind should be (1) the legal definition, (2) those who may become blind, and (3) those who would particularly benefit from training by "blind methods." DR. STREHL (GERMANY) reported that the present law in Germany defines blindness as 1/60. MR. CHRISTIANSEN (NEW ZEALAND) requested a listing of the causes of blindness. MR. DASSANAIKE (CEYLON) pointed out the difficulties of the underdeveloped countries in setting up a minimum definition of blindness. M. SALIS (FRANCE) proposed a definition of 1/60, but also suggested the creation of organizations of and for the partially sighted. PROF. VEIGA (BRAZIL) proposed the adoption of a definition for the totally blind and the provision of special means for them. DR. VAN SCHALKWIJK (SOUTH AFRICA) proposed that for adults there should be a definition in ophthalmic terms, but for educational purposes the term "those unable to use ordinary school methods" should apply. He supported the British definition which included "those who may become blind." MR. ANDERSON (UNITED KINGDOM) warned against the danger of inducing functional blindness. MR. ENC (TURKEY) suggested that minimum and maximum definitions should be accepted in accordance with the economic opportunities of the individual countries. CAPT. DESAI (INDIA) stressed the need for definitions for the totally and partially blind, particularly in the underdeveloped countries. DR. GOTTWALD (GERMANY) thought that only a non-ophthalmic definition should be accepted with children, but support 1/20 for adults. SR. ESQUERRA (SPAIN) pointed out the lack of uniformity of practice among examining ophthalmologists.

RESOLUTION II

The World Assembly of the World Council for the Welfare of the Blind adopts the following as a minimum definition of blindness and urges its acceptance as a minimum definition by all Governments and Organizations responsible for extending services to the blind:

- a) Total absence of sight, or
- b) Visual acuity not exceeding 3/60 or 10/200 (Snellen) in the better eye with correcting lenses, or
- c) Serious limitation in the field of vision, generally to not greater than 20 degrees.

The Council recognizes that many persons with sight in the better eye, after correction equal to 20/200 or 6/60 in the metric system, are seriously handicapped visually, and strongly urges that wherever possible, the definition of blindness be expanded to include all those with this degree of visual loss.

RESOLUTION III

The World Assembly of the World Council for the Welfare of the Blind resolves that inasmuch as the totally blind are in many cases more seriously handicapped than those other blind who retain some residual vision, every effort be made to insure that whenever possible the totally blind shall be accorded such preferential services and assistance as may be required to assure them equal opportunity with all other categories of blind persons.

FIFTH SESSION**Monday Morning, August 9, 1954****BUSINESS SESSION****Chairman: Col. E. A. Baker**

Col. E. A. Baker, World Council President, presented the following Report on the Activities of the Executive Committee since the First General Assembly, July 18 and 19, 1951.

It is my privilege to present this report on the activities of your Executive Committee from the time of our inauguration up to the present.

For over half a century, outstanding workers for the blind on this continent and in other parts of the world dreamed of the establishment of a world organization. Many of you in attendance here today will remember the efforts over many years to establish a world organization. I well remember the 1931 World Conference in New York City. There was much discussion; many resolutions were passed, including one calling for the establishment of an organization such as ours. Due to inability to reach agreement, the hoped for organization was not realized.

The next International Conference was held in 1949 at Merton College, Oxford. The shock of the second Great War had apparently strengthened the desire for a world organization. Among the resolutions of that conference were two of special significance. One provided that an International Committee should be set up with two functions; first, to present views of the conference on minimum standards in work for the blind to the United Nations agencies and otherwise for seeking recognition of the necessity of providing such services; second, to work for the establishment of a permanent world-wide organization to work for the welfare of the blind.

The second resolution emphasized the importance of adequate education for blind youth throughout the world and set up a committee to plan and conduct appropriate supporting action. This Committee, under the chairmanship of Dr. Gabriel Farrell, later requested and received recognition as our World Council's Committee on the Education of Blind Youth. The Committee appointed to develop the world organization had for its Chairman, Mr. W. McG. Eagar. This committee did succeed quite effectively in bringing the Oxford resolutions to the attention of the United Nations. It also succeeded in developing a constitution and by-laws for the World Council for the Welfare of the Blind, drafted in accordance with the laws of France and with the head office located in Paris.

At a meeting held in Paris on July 18 and 19, 1951, a General Assembly meeting, with all delegates to the Oxford Conference being invited either to attend or to be represented by proxy, the

Constitution and By-Laws were adopted. On publication in the official journal of the Government of France, August 20, 1951, the World Council became a legal entity. This first general meeting elected officers and members of the Executive. I was proud to accept the Assembly's invitation to serve as President of the Council. Dr. Carl Strehl of Germany and Mr. W. McG. Eagar of the United Kingdom were elected vice-presidents (the latter having since resigned), Henri Amblard of France serves as Treasurer and Eric T. Boulter of the American Foundation for Overseas Blind serves as Secretary General. Representative members from nine countries serve on the Council's Executive Committee.

Your Executive Committee recognized at the outset that co-operation should be encouraged between on the one hand, the UN and each of its specialized agencies whose work has or could have bearing on services for the blind, and on the other hand, all international non-governmental organizations interested in the rehabilitation of all categories of physically handicapped persons. Conferences between UN agencies and Non-Governmental Organizations in which our Council participated, held in Geneva, in February, 1950, and October, 1951, led to the creation of (A) the UN Technical Working Group for the Rehabilitation of the Physically Handicapped, (B) the Rehabilitation Unit of the Division of Social Welfare at the United Nations headquarters, and (C) the Conference of Non-Governmental Organizations interested in the Rehabilitation of the Physically Handicapped. In February, 1953, I had the privilege of attending the Conference of International Non-Governmental Organizations held at United Nations headquarters in New York.

In addition to adopting several resolutions of importance to the blind, that Conference provided for the establishment of a continuing permanent association of Non-Governmental Organizations. This permanent body has now been created under the name, "Conference of World Organizations Interested in the Handicapped." Our Secretary General, Mr. Eric T. Boulter, serves as Vice-Chairman of this continuing Conference. Among other matters of vital importance to the blind, to be discussed at the next meeting of the UN Technical Working Group to be held in October, 1954, will be efforts to evolve internationally acceptable definitions of blindness for recognition throughout the world.

If these efforts are successful, the Working Group recommendations will be submitted to the UN General Assembly through the Economic and Social Council for recommendation to all member governments. Governmental recognition of these definitions would obviously affect such matters as the payment of

blindness allowances (pensions for the blind), handicap allowances, social security and other grants to legally blind persons. The group is therefore studying the whole question of allowances for the blind and possibly other severely handicapped groups, maintaining throughout close contact with the World Council and other interested Non-Governmental Organizations.

The establishment in Cairo of the Demonstration Project for the Blind of the Middle East is a direct outcome of decisions taken at earlier meetings of the Technical Working Group in response to suggestions referred to it by the Conference of Non-Governmental Organizations. The World Council prepared and submitted the plan as a working document for the Non-Governmental Organization Conference in October, 1951.

The UN Technical Working Group is composed of the UN Division of Social Welfare, UNESCO, WHO, ILO, UNICEF, and for special purposes, UN Technical Assistance Administration and FAO. The Conference of World Organizations Interested in the Handicapped includes such groups as International Society for the Welfare of Cripples, World Veterans Federation, International Association of Employers, representatives of the three largest international associations of labor unions, World Medical Association, International Union for Child Welfare and International Association for the Prevention of Blindness. Arrangements have been completed for our World Council to be represented by Mr. Stevan Uzelac, a member of our Executive, at the forth-coming World Child Welfare Congress in Zagreb, and by Mr. F. G. Tingen at the Sixth Congress of the International Society for the Welfare of Cripples at The Hague.

The World Council's role in international affairs has been recognized by its admission to Consultative Status with the UN Economic and Social Council and UNICEF.

During the preparation of the UNESCO Convention covering the importation of economic, social and cultural materials, representation was made for the inclusion of appliances specially designed for the blind; braille books, braille paper, etc., as items which should be admitted free of all customs duties and for the purchase of which governments were recommended to make foreign currency available. This convention has now been signed by approximately thirty countries and ratified by several national legislatures.

It is anticipated that consultation with UNESCO will lead to the inclusion of a provision allowing international travel concessions to blind persons accompanied by guides in a convention covering general international travel provisions now in course of preparation by UNESCO.

The Council's Sub-Committee on Technical Appliances has held several meetings and has made considerable progress in encouraging the development of new media for Talking Book production. Attention has also been paid to the production of devices for communicating with the deaf-blind, research on reading machines and the study of solid dot braille. An international exhibit of technical appliances for the blind has been established at Council headquarters in Paris.

In accordance with a decision of the Oxford Conference, an International Conference of Educators of Blind Youth was held in The Netherlands in August, 1952, under the sponsorship of the World Council's Education Committee. Its far-reaching resolutions have since been widely circulated. The continuing International Conference of Educators of Blind Youth it created has since applied for and been granted recognition as the World Council's Consultative Committee on Education. Similar recognition has been granted to the World Braille Council, which was originally created under the ægis of UNESCO to deal with all international problems surrounding the allocation of braille symbols for linguistic, music, mathematics and other purposes.

This Conference, held under the joint sponsorship of WCWB and its Consultative Committee, WBC, and under UNESCO patronage in Paris, during the period, July 22 to 30, has completed its sessions. A report will be given by Mr. L. W. Rodenberg, who served during the last two years as UNESCO's Consultant on Braille Music, during our afternoon session today. Much effort and time-consuming research has been undertaken to achieve a greater degree of uniformity throughout the world. I am sure Mr. Rodenberg will report encouraging progress.

The 1952 meeting of our Executive was held in Bussum, Holland, July 22 to 24, just prior to the opening of the International Conference on the Education of Blind Youth.

Our 1953 Executive meeting was held at Como, Italy, August 3 to 5, inclusive. The Minutes of these two meetings were circulated to all members.

Our 1954 Executive meeting was held in Paris on August 4. At these three meetings we had good attendance, active and harmonious discussions and encouraging reports on progress.

In the early portion of this report, I referred to the dream of a world organization for the welfare of the blind and the long delay in its establishment. Earlier conferences undoubtedly paved the way by demonstrating the widespread desire and possibilities for such an organization.

While many resolutions came out of the earlier conferences, limited success attended the efforts of those who attempted to

secure their practical application. With our World Council now established and with all concerned being fully conscious that co-operation and concerted effort alone can ensure progress, we are now in a position not only to pass resolutions on which we agree, but as well, to follow through. We have as working media, the United Nations and its Specialized Agencies represented in the Technical Working Group, the Conference of World Organizations Interested in the Handicapped, our own consultative committees, and active members of our General Assembly in many nations throughout the world, prepared and able to undertake effective measures for the establishment and recognition of better education and service facilities for the blind.

Furthermore, we are in a position to press more effectively for the prevention of blindness. We who are intimately involved in services for the blind are in a more strategic position than any other group in the world to argue effectively for better health programmes involving the prevention and cure of blindness.

Having been made increasingly aware of the needs of the blind and the potentially blind of the world, it becomes our inescapable duty and privilege to act.

[Upon motion made by Dr. Strehl (Germany) and seconded by Mr. Askew (United Kingdom), the President's Report was unanimously accepted.]

Treasurer's Report (through July 31, 1954)

The Treasurer, M. Henri Amblard (France) reported that since the establishment of the World Council a total amount of \$11,505.26 had been received in membership fees. Additional income from other sources totalled \$23,249.36, the greater part of this amount being made up of special contributions towards the cost of holding the International Conference on Braille Music and the present World Assembly. Such contributions had been received from The Marguerite T. Doane Charitable Foundation, American Foundation for Overseas Blind, Canadian National Institute for the Blind, The Royal National Institute for the Blind, St. Dunstan's, the Royal Blind School Edinburgh and the Scottish National Institution for the War Blind. It was understood that the grant of funds had also been approved by the American Foundation for the Blind, but not yet transferred.

Disbursements to date totalled \$14,124.27, leaving the Council with a credit balance of \$20,630.35. It was pointed out, however, that most of the expenses in connection with the International Conference on Braille Music and the present World Assembly would have to be met from this balance, so that the

Council's position, while sound, was not as satisfactory as might appear at first glance.

The Treasurer stated that in his judgment any expansion of the Council's activities would necessarily entail an equivalent increase in membership fees or the assurance of increased funds from other sources.

[Upon motion made by Capt. Desai (India) and seconded by Dr. Strehl (Germany), the Treasurer's Report was unanimously accepted.]

Consideration of Proposed Constitutional Amendments

It was the feeling of the Assembly that the Constitution should now provide greater representation of all countries on the Executive Committee and the widest regional representation in officerships. Following considerable discussion at this and the final conference session, several amendments to the Constitution were approved, the revised texts to read as follows:

Article III, Section 2 — REPRESENTATIVE MEMBERS. Representative members shall be those members nominated by each country participating in the Council. Countries having a general population of less than twenty million shall be entitled to name two Representative Members. Countries with a general population between twenty million and forty million shall be entitled to name four Representative Members. Countries with a population exceeding forty million shall be entitled to name six Representative Members. Countries having non-self-governing territories under their administration should, wherever possible, arrange for the views of such territories to be expressed by their Representative Members. In the event of a country being unable to agree on the nomination of any representative member or members, the Executive Committee has power to invite such person or persons from within the country concerned as it considers best qualified to represent that country's interests. All Representative Members should hold or have held responsible positions in the direction or administration of recognized agencies for the blind.

Providing the terms of this article are complied with, any individual whose permanent residence and professional employment is located within a member country shall be eligible to serve as a Representative Member of that country's delegation regardless of the nationality of such individual.

Article V, Section 1 — COMPOSITION. Until otherwise determined by the requisite majority of the General Assembly there shall be an Executive Committee elected to serve from the conclusion of one General Assembly until the conclusion of the

next General Assembly. The Executive Committee shall consist of: seven (7) representatives from European countries, five (5) from North America, four (4) from the East Asia area, two (2) from South America, one (1) from the Middle East area, one (1) from Oceania, and such other individuals up to a maximum of three (3) in number as may be elected by the General Assembly, also the Chairmen of all Consultative Committees, also the Secretary General who shall not hold territorial status during his term of office as Secretary General, and whose seat as a Representative Member shall during such time be available to another person elected to the General Assembly by the country concerned.

At any meeting of the Executive Committee a majority of the elected members shall constitute a quorum for the purpose of conducting business.

The representatives of member countries of each specified area shall be responsible for designating the requisite number of individuals to represent them on the Executive Committee. All members of the Executive Committee shall be eligible for re-election.

Should a member of the Executive Committee serving as an elected representative of a regional area be prevented by good cause from attending any meeting of the Committee, the representatives of the member countries of that area shall be responsible for naming a substitute to serve as observer.

In the event of the death or resignation of a member of the Executive Committee serving as an elected representative of a regional area, the representative membership of that regional area shall be requested to elect a replacement to serve until the next General Assembly. In the event of the death or resignation of any other member, the Executive Committee shall have power to name a replacement.

Article V, Section 2 — FUNCTION. The Committee shall have power of decision and be directly responsible to the General Assembly for interpreting and carrying out in detail the general policies agreed upon by the Assembly for the administration, management and control of the property and affairs of the Council.

The Executive Committee shall have the widest powers to do and authorize any action not specifically reserved for the General Assembly. It shall supervise the administration of the Officers of the Council and has the right at all times to ask for an account of their actions.

The Executive Committee shall meet at intervals of not more than two years. The President shall have power, if he deems it

necessary, to ask for decisions on specific matters by postal vote of all members of the Committee.

Between meetings of the General Assembly questions which in the judgment of the Executive Committee lie outside the powers committed to it may be decided by letter ballot of all representative members.

Article V, Section 3 — VOTING. All questions shall be decided by the vote of the majority of those voting.

Article VI — OFFICERS. a) Officers of the Council shall be elected by the General Assembly from among those already elected to the Executive Committee. The officers shall serve from the conclusion of one General Assembly until the conclusion of the next. b) They shall consist of a President, not more than five (5) Vice Presidents, a Secretary General and a Treasurer. The Secretary General during his term of office shall not hold territorial status, and his seat as an elected representative member of the Executive Committee during such time as he shall serve as Secretary General shall be available to another person elected to the General Assembly by the country concerned. c) The Vice Presidents shall perform such duties as may be assigned to them by the Executive Committee and those delegated to them by the President. Any one of them may preside over meetings of the General Assembly and Executive Committee in the absence of the President. d) The Secretary and the Treasurer shall perform, under the direction of the Executive Committee, the duties properly appertaining to those offices.

Article VIII, Section 2 — MEMBERSHIP FEES. The membership fee shall be one hundred dollars (\$100) in the currency of the United States, or the equivalent of such amount in French francs, for each Representative Member which each country shall be entitled to name under the provisions of Article III, Section 2. Subscriptions shall be payable on the first day of January of each year. Members whose annual fee has not been paid within six months after the beginning of the financial year may be declared by the Executive Committee to have forfeited membership.

Savings made on the annual budget shall constitute a reserve fund which shall be banked.

Article VIII, Section 3 — EXPENSES. It shall be the duty of the Executive Committee at all times to keep the expenses of the Council strictly within the income thereof. If, by reason of deficit in the anticipated income or for other cause, the income is insufficient for work in hand or contemplated, the Executive Committee shall have power to raise additional funds by any legitimate means after consulting and with the approval of the

representative membership of the country or countries in which such fund raising activity is to take place.

Election of Nominating Committee

The following persons were elected to serve as members of the Nominating Committee:

George L. Raverat (France), Chairman
Alfred Allen (United States)
W. G. Askew (United Kingdom)
Dr. Andres Bustamente Gurria (Mexico)
Kingsley Dassanaiké (Ceylon)
Sayed Fattah (Egypt)

SIXTH SESSION Monday Afternoon, August 9, 1954
REPORTS FROM CONSULTATIVE COMMITTEES
AND SPECIALIZED CONFERENCES

Presiding: Col. E. A. Baker

At this session we are to receive reports from the International Conference of Educators of Blind Youth and the World Braille Council. Both these organizations requested and were granted consultative status by your Executive Committee. Should any matter come to the attention of your Executive Committee which involves the field covered by either of these two organizations, we would naturally consult with them as appropriate. They are, in effect, regarded as specialists in the respective fields which they serve. I believe you will find these reports both interesting and helpful.

Braille Chairman: Sir Clutha Mackenzie, Chairman, World Braille Council; United Nations Consultant to Pakistan, Auckland, New Zealand

As Chairman of the World Braille Council I welcome the opportunity to express the warm and enduring thanks of that Council and of the blind people of the world for the magnificent assistance which UNESCO, in whose headquarters we are now conferring, has given in the solution of world-wide problems in the field of braille. The World Braille Council is itself a creation of UNESCO, and now, as the UNESCO participation is diminishing with the gradual completion of the main orthographic task. another international body, the World Council for the Welfare of the Blind, is stepping in with a view to taking over altogether when UNESCO's aid finally ceases.

We are profoundly grateful to WCWB for guaranteeing the continuation of the work and, indeed, for the positive part it has already taken in organizing with UNESCO the International Conference on Braille Music Notation held in Paris last month.

Under UNESCO, orthographic uniformity has been extended to the whole of Africa, to the great Perso-Arabic area, to the languages of Western, Southern and Southeast Asia, and in the realm of contracted braille to Spanish- and Portuguese-speaking territories. Presses are now at work in Egypt, Jordan, Turkey, India, Malaya and elsewhere turning out books printed in World Braille adapted to their own national languages.

I regret that time does not allow me to thank the innumerable organizations and people who have given their ready help, but I would like to say how much the Council appreciates the financial aid given to the Music Conference by the American Foundation for the Blind, the Canadian National Institute for the Blind and the Royal National Institute for the Blind, London. Various as-

pects of the universal rationalization of braille usage will be touched on by those who are contributing papers to this afternoon's session.

GENERAL SUMMARY OF WORK OF THE WORLD BRAILLE COUNCIL

Prof. Pierre Henri, Institut National des Jeunes Aveugles,
Paris, France

In the Spring of 1948 Professor Humayun Kabir, Assistant Secretary of the Indian Ministry of Education, struck by the many different braille alphabets used in his own country and aware of the difficulties which this presented in the education and rehabilitation of the blind, persuaded the Indian government to request UNESCO to study the problem on an international level. This was the beginning of a fruitful work which has now expanded far beyond the original objective.

In July, 1949, Sir Clutha Mackenzie was invited to come to Paris, to UNESCO headquarters, to study the possibility of braille unification throughout the world. Sir Clutha had had an active part in the rehabilitation of the Indian war blind and had also had the opportunity of familiarizing himself with the various applications of braille to the Indian, Malayan and Chinese languages. The section of which he became the mainspring was attached to the Division for the Improvement of Means and Techniques of Information in the Department of Mass Communication. For three years, the Director General of UNESCO, M. Torres Bodet, and Sir Clutha's immediate superiors, Messrs. Douglas Schneider and Philippe Desjardins, took a constant interest in this very special problem even though it concerned only a minority group. And because it was to improve the very thing which could bring education, science and culture to this group, not only increasing human values but also opening new means towards professional and social rehabilitation, UNESCO did not hesitate to appropriate the sizable amount of money that this program needed for a period of several years.

The system of Louis Braille, completed for the French language by the publications of 1829 and 1837, was adapted to practically all western European languages within thirty years. But even at that time, sometimes in the same country, one could find differences of meaning from the original braille alphabet. The Congress of Paris of 1878 brought unity to the European languages by laying down the principle of the immutability of the original order of the 63 signs of Braille's system for such regional alphabets as French, English and German. Only the English-speaking part of North America was to extend the period of incoherent groping until 1917, which caused a considerable waste of

effort and money but which finally ended in a complete acceptance of the original braille. The application of raised dot writing to languages outside of Europe was often done spontaneously, sometimes with method but following the principle of juxtaposition which broke the unity because it led to the use of a different braille sign for an identical sound in related languages and sometimes in the same language in two neighboring countries. Whatever the blind read they read in braille—experience had proved that any other system was less satisfactory—but they did not always follow the original system. Such was the situation in several parts of the world when the problem was brought to UNESCO. A first period (July, 1949 to March, 1950) was spent in studying the problem. Sir Clutha collected documentation, made comparative charts, asked for advice from blind persons as well as from experts in languages and phonetics. A consultative committee of nine members meeting in Paris in December, 1949, recommended to the Director General of UNESCO that a general meeting be called, composed of representatives of various linguistic groups, specialists in braille and publishers of braille books. These delegates would have the task of seeking a common ground and establishing a principle which would permit the unification of national alphabets.

Should one look for general unification or should one simply try to attain harmony within each large group, the principles remaining different in each group? Was phonetic or graphic similarity to be the basis? Generally speaking, these were the problems, problems with many practical considerations (importance of the existing stock of publications in a certain dissident system, the Japanese system, for example) as well as political and sentimental considerations (for example, where romanization was dreaded, the fear that the proposed unification was only a thinly disguised romanization).

The majority of the delegates from the 17 nations who met at UNESCO in March, 1950, agreed to the application of the "same sound-same sign" principle for world alphabets using the 1878 allocation of signs as the basis. Moreover, this general meeting recommended the calling of regional conferences, either for the application of that principle to certain linguistic zones, or for the adoption of a single system of abbreviations wherever the same language was used. Finally, it expressed the wish that a permanent organization be created under UNESCO which would work towards unification and the best use of the braille system.

One judges the value of an assembly's resolutions by the results obtained. From this point of view, the success of the conference of March, 1950, has been remarkable. Less than three months later, in June, 1950, the Indian experts who had adopted

another method at a previous meeting, decided to abide by the Paris decisions. Thus, not only was the wish of the Indian government realized, but the decision supported the idea of general unification.

In February, 1951, a regional conference was held in Beirut, attended by delegates from the countries concerned. Here agreement was reached on Arabic braille in spite of the difficulty which at first seemed to present itself—the question of reading from right to left instead of from left to right. The work which had been started ten months earlier in Paris, in a sub-committee of the General Conference, was greatly helped by the adaptation of braille to the international phonetic code. This transcription of phonetic symbols in raised dots will be a great asset for the application of braille to the tribal languages of Africa and elsewhere where no written language exists and where it is impossible to look for a relationship of sign to sign.

At the end of November, 1951, another regional conference took place in Montevideo. This conference had the task of establishing a single system of abbreviations for the Spanish as well as the Portuguese languages. Before that time a braille book printed in Madrid could not be read by a blind man in Buenos Aires and vice-versa. Today, thanks to the goodwill shown by the delegates at Montevideo, Spain and the whole of Latin America have only two systems, one for Spanish and one for Portuguese. Thus was accomplished for those two languages what had been done for English in 1932, following talks at the 1931 International Conference in New York.

The Conference of Montevideo was scarcely finished when Sir Clutha flew to Paris where another consultative committee was to meet. The objective this time was to obtain the agreement of the Director General of UNESCO to the creation of a permanent organization, the World Braille Council (WBC) whose role we have already defined. Finally set up in July, 1952, the WBC has nine members, six of whom are responsible for the establishment and proper functioning of the system, each in a special zone, while the three others are responsible for common problems of a technical nature of all the zones (musical notation, scientific symbols, catalogue of braille publications). Priority for these problems is as follows: Unification of musical notations; unification of scientific and mathematical notations; establishment of a general catalogue of braille publications; creation of regional committees for the development of a sound system of abbreviations applicable to the languages of each region; application of braille to tribal languages. Thanks to the budget granted by UNESCO for 1954-55, the first part of this program is already under way. Our colleague, Mr. L. W. Rodenberg, will talk to you shortly about the

meeting of experts which has already started the study of musical notations.

In August, 1953, the Executive Committee of WCWB meeting at Como, Italy, voted to accept sponsorship of the WBC, after the members of the latter had approved this action. This does not mean that the WBC has parted from UNESCO. UNESCO is beset by many problems and cannot continue the financial support that it has given to the blind for five years, yet WBC still needs its moral protection and the support of its authority. The WBC has the task of improving that tool which will entitle a daily increasing number of blind people to participate in all forms of culture. This task is in perfect accord with the aims of UNESCO, and WBC will make a point of remaining faithful to the spirit which motivates that great international organization.

Once its attention had been called to the blind and their problems, UNESCO did not limit its activities to a single phase alone, and we therefore must mention two of its other interests.

On November 22, 1950, an agreement, prepared by UNESCO, was recorded at Lake Success, according to which the contracting nations agreed not to apply the normal customs duties on importations of materials for educative, scientific and cultural purposes. Annex "E" mentions explicitly that the above privilege is to be applied to books and documents printed in raised dots imported by organizations for the welfare of the blind and recognized as such by the importing country. To date, nineteen nations have ratified the convention, thirteen have signed without ratification and seventeen others have taken no action.

UNESCO has also made available to blind persons the benefits of its system of mutual aid (*Projets d'entr' aide*). Thanks to the generosity of private organizations in more developed countries, institutions in poorer countries have received mutual aid coupons (*Bons d'entre' aide*) which have enabled them to improve their equipment.

Today, serving as a link between WCWB, of which it is now a consultative committee, and UNESCO, from which it began, WBC will work towards the further development of such projects, always maintaining close and fruitful contacts with the organization which created it and the organization which has adopted it.

In conclusion, we would like to ask the officers of the WCWB to express to UNESCO the gratitude of the blind of the world for the interest it has shown in them.

BEIRUT CONFERENCE ON PERSO-ARABIC BRAILLE

El Sayed A. Fattah, Inspector General, Education of the Handicapped,
Ministry of Education, Cairo, Egypt

This report tells the story of Perso-Arabic Braille, how it started, the needs for standardization, the attempts at reaching unification and the development of the present Unified Braille. Though unified braille is quite similar to the International Braille Code, there is still need for further work. This I will point out later.

As the time allowed for this report is rather limited, I shall discuss only briefly the history of Arabic Braille particularly in Egypt, before the new "Unified Braille" came into existence. I will try to indicate the trends and the needs for Unified Braille in Arabic countries and its importance to those in the Moslem world, to those who study the Arabic Culture, and to the Arabic blind who study foreign languages.

Around 1870, Dr. Onsy of Cairo, who was studying medicine in France, was very much impressed with the work done for the education of the blind here in Paris. As soon as he returned to his native land, Egypt, he tried to put into practice what he had seen in Paris, and started the first school for the blind in Egypt. It was the pioneer school for the blind in the Arabic world. In that school, Dr. Onsy introduced the first Arabic Braille. His braille, which was known as Onsy's Point, was similar to the well-known "New York Point." This means that the cell was two dots long and three dots wide, but was written from left to right and naturally read from right to left as the ordinary Arabic print reads. Some books which were printed in this point are still in existence. The Holy Koran is among these books. But no one now knows what happened to that pioneering school or its printing house, though we still have some of its products.

About 1900 a society of friends, half Egyptians and half Europeans, started another school for the blind in Zeitoun, a suburb of Cairo, and introduced English Braille Grade I with modifications to meet the requirements of the Arabic Alphabet. This braille alphabet kept the same form of seven lines set out by Braille regardless of the sounds given to them in the International Code. For example, the sign of the first letter in Arabic was the same as the first letter in English, the second was the same as the second in English, and so on, regardless of whether it was pronounced the same or not. It usually was not. This system prevailed all over the Arabic Braille World. But may I also call to your attention the fact that it was written from left to right and read from right to left as the ordinary Arabic script.

Since 1900, the need for contractions has continually arisen. Each country made its own contractions; as a result there was

great confusion among braille readers. Not only did this confusion exist among readers of different countries, but also between readers in the same country. In a country like Egypt, for example, there were different types of contractions. This was more or less a "Scrambled Braille" as Sir Clutha Mackenzie has called it.

The case as I have stated it was rather serious, and workers for the blind in Egypt felt that there should be some way to organize and straighten out the matter, and to bring about a simpler code. In 1941, the Ministry of Education of Egypt appointed a Committee of Braillists, linguists, educators and workers for the blind to find a solution to the problem.

This Committee formulated what was known as "The Standard Arabic Braille," Grade I, Grade I½ and a highly contracted Braille similar to the well-known Grade II.

The work of this Committee settled the confusion of contractions; but it did not deal with the sound values of Braille signs or the direction of writing or reading. In other words it confined itself to writing from left to right and reading from right to left as the ordinary Arabic script.

This brief summary gives an outline of Arabic Braille before Unified Braille came to existence. Similar problems also seemed to exist in various other Oriental languages, particularly in India. This led the Government of India to approach UNESCO in 1949 with the request that they handle the matter and put an end to such confusion. India was eager both to attain the maximum of accord between Indian and Perso-Arabic Braille and to complete the details of braille alphabets over an even wider region in the Far and Middle East.

In December, 1949, an International Conference was held in this building and delegates were wholly convinced that there should be no divergency within the International Braille Code. That means the same sound for the same sign. To achieve this end in the Perso-Arabic World a regional conference was held in Beirut in February, 1951. The importance of this conference was great for the Middle East where unity was very much needed, as the Arabic language is the link and everyday tongue of South West Asia and North Africa. In addition, the new Unified Braille which grew out of its deliberations facilitates the learning of a second language. Most of the educated people in this part of the world are bi-lingual and even tri-lingual. The International Code will pave the way for the blind student of foreign languages when he finds the Arabic Braille signs have more or less the same sound as braille symbols of his mother tongue.

The fourteen delegates attending the Beirut Conference represented the languages of Ceylon, Egypt, French North Africa, Hashemite Jordan, India, Iraq, Lebanon, Pakistan, Persia and

Syria. They recognised the trend towards Arab unity and felt that books printed in a known script would facilitate the exchange of culture and information among their various countries. Such an exchange of books and teachers made it necessary that one script be adopted by all.

It was important to decide on Unified Braille so that the two printing houses which were about to be established in Cairo and in Ramallah in Hashemite Jordan could import the proper printing equipment and begin to print the books so sorely needed in schools for the blind and in libraries and the magazines for the many blind adults in these countries.

For all the important reasons I have just mentioned, the delegates of the Beirut Conference were wholly convinced that they should not divert from the International Braille Code, though it was not by all means an easy task. It was difficult for the delegates to give up their own code which had been used for fifty years for another code which had no similarity whatsoever to theirs, neither in the signs nor the direction of writing and reading. In the beginning the new code was met with great resentment and anxiety from the blind. One of the workers for the blind in a neighbouring country appealed several times to the Ministry of Education of Egypt not to give up the old code because that would cause much confusion among the blind. The Ministry of Education was quite careful not to subject the blind to such tremendous changes until all measures had been taken to assure the advantages of the new code through experiment. Then "Uniform World Braille" was formally accepted in Egypt on May 24, 1952, and now it is the only system used.

The six-day UNESCO Regional Conference held in Beirut has achieved maximum braille uniformity between Perso-Arabic and the International Braille code. It agreed on the direction of Braille writing and reading, on the international numeral and figure signs, on punctuations with some slight modifications to meet the requirements of Perso-Arabic Braille since some of the punctuation marks are not used in such languages.

The Conference has agreed too, that future modifications, if their need arise in any country or region should, before being implemented, be submitted to the World Braille Council for consultation with all concerned and also co-ordinated with the World Braille System.

I would like here to give a brief summary of work done by the Beirut Conference in Perso-Arabic Braille uniformity with World Braille. As for the Perso-Arabic Alphabet, the conference agreed that the consonants as well as the vowels which have the same sounds as the Anglo-American letters, should take the same signs. Some signs used for Braille contractions in Latin script

were assigned to Perso-Arabic letters which do not ordinarily occur in Latin script but which have similar sounds.

It will be rather difficult to go into details on such specific matters here, but for those of you who wish to study Arabic Braille fully, may I refer you to UNESCO/Conf. 9/15 App. E. on July 13, 1951, and to App. F. for Persian Braille; and to World Braille Chart, UNESCO/Conf. 9 App. N. on September 7, 1951.

As for uniformity in methods of Braille printing in Perso-Arabic, the conference agreed that their methods should be fully in accord with World Braille.

The Beirut Conference also felt the need for Perso-Arabic Braille contractions. However, as the time allowed for the conference was rather limited, the delegates were unable to study the problem fully and left it for future deep study after the wholly new Unified Braille had been put into practice in their countries. Two printing houses have been in operation for the last two years and the need is even more persistent. This problem will be explored and discussed when Sir Clutha Mackenzie comes to Cairo next October. Arabic Braillists have already made valuable suggestions.

It was also recommended by the Conference that Persia should adopt the Unified Braille alphabet for the Holy Koran and devotional literature, as well as for initial education, and that a Grade II contracted Braille, in conformity with World Braille principles, should be designed for simplification of advanced education for the blind of Persia.

The Conference was also aware of the fact that music holds great cultural and economic value for the blind in most countries. It recommended that a Conference of Braillists and blind musicians representing Occidental and Oriental music under UNESCO should be held to improve uniformity in Braille music notation. Such uniformity would facilitate the exchange of music literature between blind musicians living in different parts of the world.

On behalf of the blind in Arabic countries, may I thank the Government of India for its approach to UNESCO, and may I thank UNESCO to whom we are indebted for its earnest effort to co-ordinate this work. May I thank also the World Council for the Welfare of the Blind which has always been an effective body for work for the blind as a whole and in this particular field especially.

And last, may I bow to the pioneer of this work, Sir Clutha Mackenzie, who has labored for years and years to hasten the light for our blind people in Asia and Africa. Without his gallant efforts and his experience, patience and guidance, the gaps which separated the various Braille systems might never have been bridged.

MONTEVIDEO CONFERENCE ON SPANISH AND PORTUGUESE BRAILLE

Juan Antonio Pardo Ospina, Director, National Federation of the Blind, Bogota, Colombia

The Spanish-Portuguese Regional Braille Conference called for the purpose of studying and preparing recommendations for the unification of Grade 2 braille for the Spanish and Portuguese languages met in Montevideo, Uruguay, during the last week of November and part of December, 1951, under the auspices of UNESCO and with the all-important collaboration of Sir Clutha Mackenzie. As a result of the conscientious work of the delegates the conference's unanimous decisions were arrived at as reported in the Proceedings, necessary compromises between the views of the various delegates being achieved.

I was honored to be unanimously elected President of the Conference and equally privileged on certain occasions to relinquish the chair to the vice-presidents, Prof. Alejandro Meza of Mexico, José Esquerro of Spain, Antonio Pegoraro from Argentina and Prof. José Ferrara de Albuquerque e Castro of Portugal.

The following attended as official delegates from their respective countries:

Victor Pares Collazo	Puerto Rico
Dorina de Gouvea Nowill	Brazil
Antonio Pegoraro	Argentine
Delfina Otero	Peru
Pedro Fajardo Moya	Chile
A. Garcia Ares	Uruguay
José Esquerro	Spain
J. de Albuquerque de Castro	Portugal
Alejandro Meza	Mexico
A. Santander Fernandez	Bolivia
Juan Antonio Pardo Ospina	Colombia

The following assisted as observers:

Sir Clutha Mackenzie	UNESCO Braille Consultant
L. Blanco Valdeperez	Spain
Miss Olimpia Ana Sant'Ana	Brazil
H. Brito Conde	Brazil
Luis Francisco Hernandez	Colombia
Miss Maria Ester Dominquez	
Miss Graciana Alvarez	
Mr. Joaquín J. Silevira Marquez	
Mr. Miguel Velasquez	
Mr. Froilan Lacruz	
Mrs. Dominga Benedetti de Alonso	Uruguay

The unification of the braille system is among the fundamental problems and prime necessities of the education of the blind.

UNESCO, which has been working most effectively towards this unification, called an International Conference in March, 1950, in Paris, during which it was agreed to convene an assembly in Montevideo for the unification of Spanish and Portuguese braille.

A regional conference on Spanish and Portuguese Braille was therefore organized under the direction of Sir Clutha Mackenzie and, as reported, success was achieved with the adoption of a system for introducing grade two braille into the Spanish and Portuguese languages.

Among the most important results of the Montevideo Conference was that of gaining UNESCO recognition of its conclusions and the fact that the unified system has been widely publicized among schools for the blind, braille editors and the blind themselves. As UNESCO and the Braille Printing Office of the National Organization of the Blind in Spain have been attending to the matter of publicity, it may be affirmed that the system unified in Montevideo is already known by those interested in this very important problem.

Not all the institutions nor the blind who should be interested in the matter of braille unification recognize the significance of the unified system or the importance of contracted braille in the areas of education and culture. This is unfortunate, particularly since in our countries the education of the blind is deficient. In fact there are some nations where there are no organizations for the blind whatsoever. Others are lacking not only in a system of reading and writing, but also facilities for employment, professional counselors and social assistance of the blind which cry out for a good organization for development. Attention to these needs should be forthcoming from the respective governments, the general public and influential organizations for the cause of the blind throughout the world.

As delegate of Colombia to the UNESCO Conference I had direct contact with all the Spanish, Latin American and Portuguese delegates. As a member of the World Braille Council I have considered it my duty to note the progress achieved towards uniformity during the more than two years that have elapsed since the conference. I am therefore acquainted with the situation in Peru, Argentina, Uruguay, Guatemala, Mexico and Colombia, and am able to say from direct observation that these countries lack schools and printing equipment. As long as these fail to exist and until the education of the blind is extended and braille taught in existing schools, there will always be a vast blank between the blind and their culture and education.

There are approximately 400,000 Spanish- and Portuguese-speaking blind people in Mexico, Central and South America, Spain and the United States, and it is not venturous to assume

that 90 to 95 percent do not know the braille system, have no schools, organizations, social assistance or beneficence, and live abandoned or availing themselves of what little they can, which is not sufficient in order to meet their needs adequately.

This problem, which the Colombian delegate has exposed as a result of his research concerning the unification of the braille system, could not go unheeded by the Pan-American Conference at Sao Paulo or by this International Conference, and it is necessary that the conclusions of these congresses be effective. In order that the work of the Assembly of Montevideo be equally successful, it is necessary that a stand be taken and resolutions adopted on the Spanish-Portuguese language question by influential organizations. We present the facts and trust that the Sao Paulo Conference and this World Assembly will provide the means by which, through the unification of the braille system, our 400,000 blind people may take a step towards the establishment of a situation comparable to that which exists among the blind of the United States and Europe.

It will be recognized that action for the unification of Spanish-Portuguese Braille, even though accepted by existing schools and agencies, will be ineffective while we continue to suffer a considerable lack of necessary educational establishments. Without such schools and services the action taken at Montevideo can never reach the majority of our blind citizens.

The Colombian delegate desires not merely to describe the vast problems that confront the Spanish-Portuguese language area, but also to present recommendations for their solution. At the Pan-American conference for the Welfare of the Blind and Prevention of Blindness, we presented two suggestions, one calling for the introduction of a Pan-American co-operative plan and one urging the adoption of legislation by all governments of the region that would assure the provision of minimum standards of services to all their blind citizens. We now make similar recommendations to this World Assembly. If such action is taken we feel it will constitute a major step towards the provision of necessary services for education, employment, social assistance and the general wellbeing of the blind. As a helpful step towards the preparation of suitable legislation, the Colombian delegate has prepared and distributed a summary of legislation affecting the blind already operative in Brazil, Puerto Rico, Mexico, Spain, Chile and Colombia.

As a delegate to the World Braille Council of UNESCO I have been continuously interested since December 1951, in the employment and application of contracted braille grade 2 approved at Montevideo. In this respect I can state that agreement was

reached at Montevideo as can be seen by the following declarations:

MEXICO—Prof. Alejandro Meza: "I take pleasure in informing you that Braille, second grade, as established at Montevideo, *was accepted in my country right away and without any objections*. We have already circulated a considerable number of copies of the manual edited in Spain, which you have already read. Furthermore, a meeting of the Braille Committee of Mexico was held recently together with representatives of the Junior League and it was unanimously agreed to adopt immediately Grade One, derived from Grade Two, in accordance with the recommendations of our Montevideo Conference. The respective manual is about to be edited and as soon as it has been sufficiently circulated, we shall begin to use Grade Two regularly in all publications for which we consider this suited."

PORTUGAL—Mr. J. de Albuquerque e Castro: "With regard to your questionnaire, I would like to say: Since we have been using the contractions established at Montevideo for a long time in Portugal, for Portuguese, we found no difficulty in complying with the regulations which the aforementioned Conference established. It so happens that we are even used to Grade 3, so much so that Grade 2 aroused little interest, the former being derived from the latter. A publication has already been put out by the Fundacao para o Livro do Cego No Brazil, Sao Paulo, and same is about to be edited by A. F. de Castillo School of Lisbon. It seems that in Brazil there were some differences of opinion, but we believe that the fact that the Fundacao has decided to use Grade 2 in all publications, will help to reconcile these differences."

BOLIVIA—Mr. Alberto Santander Fernandez: "The Braille system, grade two, as established by the Montevideo Conference has found acceptance at all schools for the Blind. The experience thus gathered, leads us to make the following recommendations: The use of the hyphen where punctuation is concerned. Contractions for plural forms as os, as, etc., and the use of a capital sign in contracted form."

VENEZUELA—Mr. Roberto Martinez Centeno: "The Braille system, grade two, as established at Montevideo, has been favorably received, because even though the symbols which have been introduced reduce the quantity of words, there is a more logical relation between the word and the contracted form. This tends to lessen the deformation of the language. Unfortunately, we cannot as yet express our final opinion, inasmuch as the system has only recently been put to practical use."

CUBA—Mr. Enrique Berenguer answers in the name of Dr. Zacarias Alvisa and says: "Concerning the contracted forms adopted at Montevideo in 1951, Dr. Alvisa regrets that the recom-

mendations for some of the contracted forms connected to phonetics, as established, have no connection to Spanish. For example "Sp" used to stand for "siempre" and this brief form was replaced by another. This same happened to other contracted forms which have, in accordance with Dr. Alvisa's opinion, been replaced without justification."

SPAIN—Mr. José Esquerra: "It will be my pleasure, within a few days, to send you the requested information with regard to the practical results of the Last Conference, with reference to the development and putting to practical use unified Braille, grade two."

Note: Since the Spanish delegation at Montevideo approved of the unification of braille and after this published material to this effect which was widely disseminated, we may take it that this resolution was accepted.

PUERTO RICO—Mr. Manuel Hernandez: "We, who are on the faculty of the Puerto Rico Institute for Blind Children, have in general terms accepted Braille, grade two, as established at the Regional Conference of UNESCO, which convened at Montevideo between November 26 and December 2, 1951. In our opinion the system should be enthusiastically received by all institutes and organizations which work for the education of blind Spanish-speaking people. In our opinion, once contractions have been unified, it will simultaneously become an urgent necessity, not only for the blind student who is taking a secondary or university course but also for all publications of literature edited in Spanish."

CHILE—Mr. Juan Escobar, Director of the School for the Blind: "Braille grade two, unified, as worked out at the Montevideo Conference, was enthusiastically received, not so much because it was a perfectly finished masterpiece, but rather because it was found necessary to take such a step. Grade Two Braille, unified, has tremendous advantages and is practically the answer to a prayer. It is what we have for so long hoped for, one system of braille contractions which will not be changed at will and undergo changes overnight, as has been the case in the past. Furthermore, although the unified braille system, grade two, is not perfect and finished, there is nothing enigmatic about it and neither is it an unacceptable absurdity. Unfortunately, it happens so often that one is out in search of the very best and in this endeavor one forgets to make use of what is only good. Now, two years have already gone by since the Montevideo Conference met and, in Chile, no information, comment, nothing has been received and we are absolutely in the dark as to what happened to the unification of braille, grade two."

COLOMBIA—Juan Antonio Pardo Ospina and Hector Cadavid, assistant to the Board of Directors of the School for the Blind in Medellin: "Colombia accepts the contracted forms of Braille,

Grade Two, as established at the Regional Conference at Montevideo in 1951. The system is generally put into practice at special schools and by blind individuals. Colombia wishes to reserve herself the right to make such observations and suggestions as are deemed necessary and useful and these would be made to the respective Regional Committee."

Some of the Central American and South American countries which are not mentioned here, did not answer the questionnaire which was submitted, with regard to their opinion concerning unified Braille, grade two. It is to be supposed that their silence is to express their agreement with the resolutions adopted at the Montevideo Conference.

As a member of the UNESCO World Braille Council I have provided that Council with the results of my conscientious investigation as to the employment and practical application of grade 2 braille. I consider, and in this I insist, that it is the duty of the World Council for the Welfare of the Blind at its present meeting to study and resolve the situation of the Spanish- and Portuguese-speaking blind. As I have already stated, 400,000 blind people await effective and tangible action by influential organizations for the blind. Without adequate institutions and schools for the education of the blind, the use of the braille system would be lost, and the efforts achieved by UNESCO and the World Braille Council would also be futile.

INTERNATIONAL CONFERENCE ON BRAILLE MUSIC

L. W. Rodenberg, UNESCO Braille Music Consultant; Blind Services Superintendent, Illinois Braille and Sight-saving School, Jacksonville, Illinois, United States

A complete roster of delegates and observers who participated in the 1954 international conference on braille music may be found at the end of this report. They represented 19 countries or areas. This was the largest convocation of its kind ever assembled.

Fourteen countries or areas each sent one delegate, namely: Argentina, Belgium, Brazil, Canada, Greece, Holland, India, Japan, Mexico, the Near East and Africa, Scandinavia, Spain, Switzerland, and Yugoslavia. Five countries each sent two delegates, namely: France Germany, Italy, the United Kingdom, and the United States. The Australia-New Zealand region regretted its inability to send delegates but had contributed valuable information to pre-conference studies, as had Colombia.

The Conference was sponsored jointly by UNESCO, which was represented by Mr. Pierre Navaux; by the World Braille Council represented by its Chairman, Sir Clutha Mackenzie; and by the World Council for the Welfare of the Blind represented

by its President, Col. E. A. Baker, and Secretary-General Eric T. Boulter. The details of sponsorship and organization which led to the conference are recorded in the official documents of the sponsoring organizations and will not be reviewed in the present report.

Likewise, the findings and resolutions of the conference will not be included in toto in this report but will be found recorded in the preliminary conference report and at a later date in a revised music manual.

The deliberations of the conference were based in the main on technical documents prepared in advance in French and English and in braille and ink-print by the consultant.

The conference was preceded by a reception held at the Paris headquarters of the American Foundation for Overseas Blind, 14 rue Daru, Thursday evening, July 22. At 9.30 o'clock on the following morning the first session of the conference opened at UNESCO House, 19 avenue Kleber, with a welcome to the conference and a review of aims by M. Montagnier, Deputy Director of UNESCO. Other introductory remarks were presented by Sir Clutha Mackenzie for the World Braille Council, by Mr. Eric T. Boulter for the World Council for the Welfare of the Blind, and by Mr. George Raverat who reviewed the aims and achievements of the prior conference in 1929 for which he had served as co-ordinator. Following these remarks, Conference officers were elected as follows: Chairman, Sir Clutha Mackenzie; Vice-Chairmen, M. Gaston Litaise of France and Mr. Lal Advani of India; Rapporteur, Mr. L. W. Rodenberg.

The work of the conference began with a review of pre-conference preparations, presented by the consultant for UNESCO. The delegates were referred for a history of prior conferences to a treatise on the subject especially prepared for the present conference by Dr. Alexander Reuss, of Germany, delegate and chairman of the Deutschen Blindennotenschrift kommission. This scholarly treatise, it was explained, is available to date only in German and English, but merits translation and publication in other languages. The consultant drew attention to the significance of the present conference arising from the fact that for the first time in the history of international convocations for the improvement of braille music notation there were representatives from South America, Africa, and Asia. Special cautions were urged by the consultant against changes and innovations in the existing code which might weaken rather than strengthen it, but it was also urged that provisions must be made to meet the needs of modern compositions and modern instruments. Appreciation was expressed by the consultant for the splendid response which

was given him by pre-conference committees in certain countries, without which it would have been impossible to prepare the technical papers for the conference. Considerable progress was made because of this co-operation prior to the conference, despite the great handicaps of distance and limitation of time.

Briefly summarized, the proposals discussed and adopted by the conference were the following:

1. Adoption of the principle of one universal manual of braille music notation for all countries.
2. Use and revision of the 1929 International Braille Music Notation as the basis for the new text.
3. Inclusion therein of a treatment of Gregorian Chant as prepared and presented by M. Gaston Litaie, French delegate, and a treatment of the liturgical music of the Eastern Orthodox Greek Catholic Church as prepared and presented by Mr. Emmanuel Kefakis, Greek delegate.
4. Inclusion in the new international manual of adaptations which are now being made to meet the requirements of the musical systems of India, Japan, Turkey, Egypt, and other Asian and African countries.
5. Inclusion of treatments covering figured bass, short-form scoring, accordion, guitar, and other popular instruments, which treatments were adopted in point of principle but require completion in point of detail.
6. Inclusion of impartial description both of the parallel and continental music patterns for keyboard instruments, but without recommendations as to which of the two would be preferred. During voting with a view to selection of a single pattern the first vote was nine to nine, but in a final tabulation the parallel principle was favored by four additional delegates who had been absent or had abstained at the time of the first vote. However it was ruled that the margin of preference was not decisive and that the inclusion of both patterns in the manual should stand.
7. Decision to carry out a wide experiment in the total field to test the method of indicating chords not as arbitrary interval signs but as note-heads dropped to the lower level, which method was proposed jointly by the Mexican and Spanish delegations and also, as the "Note for Note" system by the United Kingdom delegation. This decision was of major importance, since it postponed the final editing of the new universal manual possibly for two or more years pending the results of the experiment.
8. A resolution requesting the American Foundation for Overseas Blind to undertake the international cataloguing of

braille music, including a plan to facilitate international distribution, and requesting UNESCO to assist in resolving the limitations on transcribing imposed by international copyright restrictions.

9. A resolution to establish continuing machinery necessary to complete the work of the conference, which resolution is as follows:

"The conference, recognizing that further study, consultation, and in some cases experiments should be carried out before a revised edition of the universal manual on braille music notation can be published;

"Requests the World Council for the Welfare of the Blind, UNESCO, and the World Braille Council to continue to provide the service of a consultant to carry on the excellent work accomplished by Mr. L. W. Rodenberg in preparation for the present meeting. The consultant should pursue his task within the framework and in the direction of the recommendations and basic principles formulated by this conference;

"To this end he should consult to the fullest possible extent with the organizations represented at the present conference, and with national committees on braille music, many of which have made a notable contribution to the preparatory work, in order to arrive at conclusions which will advance the principle of uniformity and serve the best interests of blind musicians throughout the world.

"The conference requests the World Braille Council to assume responsibility for this work, and within the limits of its financial possibilities to afford the consultant such facilities and services as may be needed for the full accomplishment of his task.

"In order to achieve this aim the delegates here assembled undertake to do all in their power to enlist the continuing support, both material and moral, of their governments and of the national organizations they represent."

In conclusion, it must be admitted that the conference had far more work to do than was possible in the allotted time, especially with the unexpected handicap of consecutive instead of simultaneous translation. Also more definite results would have been achieved if more time had been available for pre-conference preparations. It was the serious endeavor of the consultant to have completed documents for all of the deliberations of the conference, but this was found possible only in part. Therefore, a great mass of the technical work remains to be done by the

expert who will be designated by the World Braille Council and the World Council for the Welfare of the Blind.

(Because of curtailed appropriations by the General Assembly of UNESCO, that organization will presently be obliged to discontinue its Braille Unit.)

Some of the foregoing facts may be disappointing at first glance, but they fade away in the light of what was actually accomplished by the conference for the ultimate unification of braille music notation throughout the world. But this accomplishment still hangs in uncertain balance: it is dependent on the financial and moral support which only the World Council for the Welfare of the Blind and the World Braille Council can give the expert and his assistants who will undertake the completion of the program of unification.

This report closes with the consultant's sincerest thanks to sponsoring organizations and all authorities and individuals throughout the world who so generously supported him in his pre-conference labors.

INTERNATIONAL CONFERENCE ON BRAILLE MUSIC

July 22 to 30, 1954

Paris, France

OFFICIAL DELEGATES

Argentina	Raul Torrado
Belgium	Emile Waroquier
Brazil	Mrs. Wilma Gomes Mondin
Canada	John DiBiasio
Egypt and the Near East	Rida Hamedy
France	Gaston Litaie
	Gaston Regulier
Germany	Dr. Alexander Reuss
	Paul Dorken
Greece	Emmanuel Kefakis
Holland	F. Kooken
India	Lal Advani
Italy	Silvestro Sasso
	Costanzo Capirci
Japan	Tokujiro Torii
Mexico	Alejandro Meza
Scandinavia	Hans C. Seierup
Spain	Joaquim Rodrigo Vidre
Switzerland	Theodore Lang
United Kingdom	Sinclair Logan
	Harry V. Spanner
United States	Harry J. Ditzler
	Mrs. Lisle G. Edwards
Yugoslavia	Stojan Alcev

OFFICIAL OBSERVERS

AND REPRESENTATIVES OF SPONSORING ORGANIZATIONS

Col. E. A. Baker	World Council for the Welfare of the Blind
Eric T. Boulter	World Council for the Welfare of the Blind
Paul Daude	France
V. Federov	International Music Council
F. Abbott Ingalls	American Foundation for Overseas Blind
Hideyuki Iwahashi	Japan
Diaz Luis	UNESCO
Sir Clutha Mackenzie	World Braille Council
Pierre Navaux	UNESCO
George L. Raverat	World Council for the Welfare of the Blind
Robert Robitaille	Canada
Louis W. Rodenberg	UNESCO
Rafael Rodriguez Albert	Spain
Daniel Trasleglise	American Foundation for Overseas Blind

REPORT ON INTERNATIONAL CONFERENCE OF EDUCATORS OF BLIND YOUTH

E. H. Getliff, Chairman, WCWB Consultative Committee on Education;
General Superintendent, Royal School of Industry for the Blind,
Bristol, England

At the 1952 International Conference of Educators of Blind Youth held at Bussum, Holland, a number of resolutions were adopted. These resolutions, together with full reports of all the work of the Conference, are now available in the printed Proceedings of the Conference.

The Executive Council of the International Conference of Educators of Blind Youth was recommended to the World Council for the Welfare of the Blind for recognition as the Consultative Committee on Education of the Council. I am happy to report that this recognition was unanimously agreed by the Council's Executive Committee at its meeting at Como, Italy, in August, 1953.

From reports and information received it would appear that the Resolutions agreed at Bussum on the educational needs of blind youth in the varied categories which were considered by the Conference, were received by many countries when national delegations had the opportunity to report back to organizations dealing with the education of the blind in their respective countries. It would be fair to state that the Bussum resolutions set forth minimum standards of requirements, offered constructive suggestions in the spheres of educational progress, yet gave scope for achievement through the special conditions prevailing in individual countries. The conference agreement on fundamental needs of blind youth in educational matters laid the foundations for efforts to be made in the years ahead towards obtaining in all countries a fuller realisation of the potential abilities of blind youth and active national awareness in supplying conditions under which the young blind may develop towards fullest citizenship.

News received from countries represented at the Bussum Conference gives proof of the effectiveness of the work of the Conference in the following ways:

1. More active steps are being taken to have suitable blind students accepted for training for the profession of school teachers.
2. Careful selection of teachers for schools for the blind, and more thorough training of such prospective teachers are receiving careful attention.
3. Through special literature and visiting teachers, parents of pre-school blind children are receiving advice and guidance in the problems of bringing up young blind children.
4. Blind children having other handicaps are now receiving more attention. Where no special schools exist for such children, the

ordinary schools for the blind are being encouraged to co-operate in offering educational facilities.

5. More opportunities are being provided for professional and commercial training for suitable blind students.

6. A lessening of the segregation of pupils in schools for the blind is being achieved.

7. The general sighted public in many countries are being educated towards a better understanding of the abilities of blind youth, by means of articles in the press, by radio and television.

8. Closer co-operation between the school for the blind, the parents of blind children and the responsible national or local statutory authority is developing in some countries where the school for the blind was previously an isolated and neglected unit.

9. Consideration of the needs for new schools for the blind is reported in areas where the number of blind children calls for additional schools. Some additional schools have already been established.

10. A fuller understanding of the educational needs of blind children is giving rise to consideration of raising the school-leaving age for blind pupils.

11. More careful thought is being given to the problem of providing security of employment, especially after professional or specialized commercial training, of suitable blind students.

12. In some areas, where no registration of blind persons exists, steps are being taken to introduce registration, so that the education of blind children may receive closer consideration and fuller provision.

13. Efforts are in hand to provide centers for higher education for suitable pupils.

14. Government recognition has been given in some instances to schools for the blind which had not previously received such recognition.

A questionnaire as follows was circulated by Perkins Institution in May, 1954, and concerned the Bussum resolutions.

1. Which, if any, of the Bussum resolutions have aided your education program for the blind?

2. Has new legislation resulted from any of these resolutions in your locality?

3. Have the Resolutions aided you in your Public Relations?

4. The resolutions are less than two years old. If they have not yet had any value, do you expect to find them helpful in the future?

5. Do you consider any of the resolutions inadequate for your purposes?

6. Are any of the resolutions impractical for your locality?

7. Would you like to suggest additions or amendments to any of these resolutions?

8. Additional comments.

Over a hundred copies of the questionnaire were sent out all over the world. Because of the shortness of time, it was not expected that a large number of replies would be received. Replies totalled twenty-seven, six of which came from Central and South America, two from Canada, one from Africa, two from Asia, and the remaining sixteen from Europe.

In a number of cases, particularly in Central and South America, it was pointed out that these resolutions had not been read previous to receipt of the questionnaire. Perhaps, because of this, it will be noted that there are more unfavorable responses from this area than from other parts of the world. The comments indicated are as follows:

1. The resolutions should also include means of implementation.
2. A request for clarification.
3. The United Nations should assist by suggesting to different Latin American countries the need for enacting laws in order to make a reality of the Bussum resolutions.
4. A recommendation that the International Conference of Educators of the Blind should keep in close touch with every school for the blind in the world.
5. Recommends that the partially sighted should go to special schools of their own or to ordinary schools.
6. Suggests substituting the words "family relations" for "sex education."
7. Requests an additional resolution urging countries to make elementary education for all blind children compulsory, and that the governments of such countries should treat schools for blind children as special schools, and afford all facilities for the education of the blind according to their normal means in schools.
8. Emphasizes the importance of a program for employment for blind children leaving school.
9. Requests the additional statement that one or more braille presses be started in each country which does not have any, or does not possess enough to print books for the blind.
10. States that the Association of German Teachers of the Blind is going to use the Bussum resolutions as a basis for promulgating further legislation to accomplish these ends.
11. Expresses a fear that the education of blind children in normal schools is being done to save public funds at the expenses of the children.
12. States that the resolutions proved of great value in two Missions of Advice in Norway and Iceland in 1953 and 1954 respectively.

Perhaps the most encouraging aspect of this report is the fact that twenty-five out of twenty-seven responses indicated the ex-

pectation that the Bussum resolutions would be of value in the future.

Many of the questionnaires contained lengthy comments and suggestions. Only the briefest tabulation has been possible. All the comments received will be of assistance in future conferences.

It will not be claimed that these developments are all direct results from the recommendations of the 1952 Conference of Educators of Blind Youth, though some most certainly are—but the Conference resolutions stimulated the work where such schemes were already being considered.

Those who attended the Bussum conference can feel that their work has already begun to bear fruit. Two years is a short space of time in which to expect many concrete results from the recommendations of the first international conference on matters dealing solely with the education of the blind, but we may take some satisfaction in a report which indicates very clearly that in two short years, from Bussum 1952 to Paris 1954, many more blind children are receiving practical answers to the questions of their educational needs because of the work of what is now the Consultative Committee on Education of the World Council for the Welfare of the Blind.

DISCUSSION

A Resolution of thanks to UNESCO for its braille work was proposed by M. HENRI (FRANCE) and seconded by MR. KEFAKIS (GREECE). SR. ESQUERRA (SPAIN) and PROF. A. MEZA (MEXICO) confirmed that the Montevideo resolutions were now in force in their countries. MR. SHAH (INDIA) thanked SIR CLUTHA MACKENZIE and UNESCO for their work on Indian braille, but appealed for final acceptance of its provisions for the benefit of the blind who should not constantly have to learn new amendments. SR. SASSO (ITALY) recommended the establishment of a braille music committee. SIR CLUTHA MACKENZIE referred to the resolution requiring the consultant to maintain contact with national committees. MR. BOULTER (UNITED STATES) suggested that all relevant Sao Paulo resolutions be referred to the Resolutions Committee, which was agreed. SR. VEIGA (BRAZIL) stressed the similarity of the Spanish and Portuguese languages and the consequent need for revision of the Montevideo resolutions. COMM. IZAAC (FRANCE) recommended the establishment of a special committee to study mathematical problems. The acceptance of the various reports on progress in the braille field was moved by M. AMBLARD (FRANCE) and seconded by PROF. DR. STREHL (GERMANY).

(At this point in the session the Brazilian Minister to France,

Sr. Ilmac Merino, and the Brazilian delegate to UNESCO, Sr. Paulo Mendoza, were introduced to the Assembly by the Council's Brazilian representative, Sr. José Espinola Veiga and Col. Baker.)

MR. GETLIFF'S report was unanimously adopted.

A resolution drawn up at a meeting of the French agencies for the blind and attended by some of the conference delegates was presented by M. GUINOT (FRANCE). This resolution made three specific requests of the World Council as follows:

1. That within the framework of the Constitution, the delegates of organizations for the blind already in existence, or which may be created in member countries of WCWB, set up permanent commissions to study problems of special interest to the blind and for the solution of which the point of view of the blind can be usefully taken into account.
2. That in all countries special legislation be enacted concerning the social welfare of the blind, and that in particular it should establish without exception the right of the blind to have the aid of a third party at the expense of the national budget.
3. That in all countries education of blind children should be compulsory and free, and that the parents of blind children should be relieved of all costs of their education and maintenance while at special schools.

After some discussion it was agreed that:

1. Since the World Council Constitution allows for the participation of organizations of and organizations for the blind, adequate opportunity is granted for the expression of viewpoint of the blind themselves in the Council's deliberations. Furthermore the Council, while wishing to encourage maximum co-operation between organizations of and for the blind in member countries, could not be responsible for specifying the exact lines along which such co-operation should be gained in each country.
2. As a number of delegates appeared to be in favor of recommending the grant of a handicap allowance to all blind persons, the resolution would receive further consideration when the Assembly gave its attention to the adoption of a resolution on economic provisions for the blind at its closing session.
3. While there was general agreement that blind children should be provided with free and compulsory education, final decision as to the type of action required by this Council towards the attainment of that objective should rest with the Consultative Committee on education, and that that resolution should therefore be referred to that Committee for further study.

RESOLUTION IV

The World Assembly of the World Council for the Welfare

of the Blind records its profound gratitude to UNESCO for the magnificent contribution that organization has made to the well-being of the world's blind people by effecting uniform usage in the field of orthographic braille and for its preliminary work in other areas of braille usage.

The Council welcomed the creation in July, 1952, of the World Braille Council which has since operated as an advisory council to UNESCO, while also serving since August, 1953, as this Council's Consultative Committee on Braille.

The Council has noted that the provisional program and budget of UNESCO for 1955-56 does not provide further funds for the solution of world braille problems after December, 1955. It urges UNESCO's member nations to make additional funds available so that the work may continue to receive financial support from UNESCO.

Recognizing the great importance of this work the World Council for the Welfare of the Blind hereby resolves to accept parent responsibility for the World Braille Council and, within the limits of its budget and other commitments, to make funds available to that Council for continued work towards international acceptance of uniform practice in all areas of braille usage. In accepting this responsibility the Council notes with gratitude that the provisional program and budget of UNESCO for 1955-56 provides for a \$5,000 subvention for 1955 and for office and postal facilities.

RESOLUTION V

The World Assembly of the World Council for the Welfare of the Blind resolves that the Representative Members of each national delegation shall draw the attention of their respective governments to the important work carried out since 1949 in the field of world braille uniformity by UNESCO, and shall urge the said governments and national commissions to UNESCO to press for continued interest and financial support by UNESCO for the completion of this work so vital to the interests of the world's blind people.

RESOLUTION VI

The World Assembly of the World Council for the Welfare of the Blind, having received a report on the proceedings of the International Conference on Braille Music, recommends that necessary financial provisions be made for the engagement of Mr. H. V. Spanner, for a period of not less than one year, to produce, with such consultations as may be necessary, the revised Braille Music Manual and to carry out such other directives as given by the Conference.

RESOLUTION VII

The World Assembly of the World Council for the Welfare of the Blind and its Consultative Committee, the World Braille Council, are of the opinion that the present effort to secure uniformity in braille music notation should be reasonably completed before a corresponding effort is made to secure unification in mathematical and scientific notations, but that the necessary preparatory work by correspondence should be encouraged in the meantime. They note with satisfaction that various national committees and individuals are formulating proposals which will be of value when the time comes for collective international consideration.

SEVENTH SESSION Monday Evening, August 9, 1954

20TH CENTURY PROBLEMS IN DEVELOPING NATIONAL SERVICE PROGRAMS

Chairman: Charles Hedkvist, Secretary, De Blindas Forening,
Stockholm, Sweden

During tonight's session we will be confronted with the enormous problems that workers for the blind in Southeast Asia and South America face. I am convinced that we will find that there is no danger of our World Council lacking tasks for a long time to come. We will hear a number of experts discuss various phases of the problem, and I have the honor of first calling upon Sir Clutha Mackenzie to give us his views.

PROBLEMS AND TECHNIQUES IN ESTABLISHING BLIND WELFARE SERVICES IN ASIA AND AFRICA

Sir Clutha Mackenzie, Chairman, World Braille Council,
Auckland, New Zealand

The Soviet Union, of which I have no direct knowledge, is omitted from the areas covered in this paper. I would also make it clear at the outset that the degree to which the considerations given below apply, naturally varies from country to country; and that certain countries are happily well on the road towards the solution of a number of the problems discussed.

Broadly speaking, the position of the blind in Asia and Africa is anything but satisfactory. Their number is enormous, something in the neighborhood of seven million; and it is safe to assume that modern service has not yet affected the lives of more than one in every two hundred of them. Let us briefly review their situation under the old social order.

The long-established traditions of joint responsibility of the family for its weaker members and of alms-giving as enjoined by religion, provided the blind with a precarious existence. If a family were modestly prosperous and food plentiful, the blind member lived idly at home; but poor families turned their blind members out to beg or, possibly, to starve. In times of famine the blind were among the first to suffer. This old-time form of "social security" still prevails in many rural areas; but under pressures of urbanization, industrialization, money economy and overpopulation, it is weakening fairly rapidly.

Most communities take it for granted that the blind are incapable of work and that it is foolish to talk of training them in any way. Among some communities this attitude is reinforced by the belief that blindness comes to a person as a punishment for evil doing in this or an earlier life, and therefore he must live out his days without ordinary men interfering with God's Will. Sometimes the social shame of having a blind member in the family finds expression in its hiding him away.

Nevertheless, despite mass discouragement, every community produces a smattering of active blind people from among both those blind from infancy and those who lose their sight in later life. Most countries indeed record in history or legend a few blind men and women who made their mark in literature, theology, music or administration, while the humbler blind discovered outlets for themselves in the simple tasks of the village and the field. Several occupations developed into traditional outlets for the blind—massage in Japan, music and fortune-telling in China, the recitation of the Holy Koran in Muslim lands, and so on.

Mainly pioneered by Christian missions, small schools and societies for the blind began to appear in Asia and Africa in the 1870s, '80s and '90s. They have been reinforced since then by schools and societies organized by other groups, the business communities of large cities, Governments and ruling princes and by blind graduates from the schools—these last rather ephemeral bodies. This period, which continued until the end of World War II, was essentially that of scattered voluntary effort uncoordinated in any way, and receiving only insignificant state aid. Much of this effort suffered during the war years, sometimes beyond revival. Since the war many of the schools have been unable to count on the same measure of voluntary support they received in the old days. This point, indeed, seems to mark the beginning of a new era, one in which, if the blind are to be given the services they need, the work must be built on a wider and stronger foundation.

The early schools have done a splendid job in laying a foundation, in showing what the blind can achieve and in paving the way for a wider service. They have created islands of useful, happy people in sharp contrast to the miserable beggars of the streets and by-ways. The schools have been particularly successful in the literary education of blind children and in training their manual dexterity. They have kindled an interest in the blind among responsible people in many large cities and have gained the attention of the press. They have, indeed, shown the way to a brighter future for the blind of their countries.

While a number of societies established excellent workshops for the permanent employment of many of their trainees, the pioneer period did not, as a whole, succeed in finding satisfactory employment for them in the everyday world. A few, of course, were appointed to posts as teachers and instructors within the societies. While this has been most valuable, it still leaves us to find a solution to the main problem of employment.

The following factors contributed towards failure in this vital field:

1. The task of changing centuries-old attitudes to the blind

was a tremendous one, particularly with so much of the population scattered throughout thousands of villages with little, if any, access to literature.

2. The pioneer societies had little in the way of trained staff and funds with which to tackle the problem. It was one which industrial and commercial managers, rather than teachers, would have been better qualified to solve.

3. A certain number of schools admitted children subject to their accepting Christian teaching. This stood in the way of many orthodox Muslims, Hindus, Buddhists and other non-Christians allowing their children to attend, and consequently these schools failed to gain the sympathy and practical aid of such influential groups. So long as the Christian missions observed the parable of "the Good Samaritan," they were admirable, but orthodox followers of other religions naturally would not trade their children's age-old beliefs for schooling. Where the missions gathered homeless orphans from the streets, baptising them in the Christian faith, it was another matter.

4. Among the poorer blind, the schools were apt to over-emphasize the literary side of education and not give thorough enough training in practical occupations applicable to the social and economic backgrounds from which they came. In fact, many schools failed altogether to establish adequate vocational training or employment service.

5. Little account was taken of the occupations the blind had followed prior to the introduction of modern training or of the possibilities of developing local village and agricultural outlets. The system in general was too close an imitation of the western pattern.

6. The training of the newly blind young adult, who is most quickly and cheaply turned into a successful worker, was almost entirely neglected.

7. Because the key problem of adult employment was not solved many of the trained blind were compelled to join the ranks of the beggars; and this did not contribute to public confidence in the worthwhileness of blind welfare. Some, on returning to their village homes found themselves not only unable to work but, at the same time, separated from their families and their old life not only by a culture which they could not use, but sometimes in language and religion.

The pioneer societies must not be blamed for this situation. They were passing through a period of trial and error; and they have left behind valuable lessons of experience which we can turn to good use.

What I have said will have shown you that the blind and the services provided for them are passing through a process of tran-

sition. One aspect of this is the gradual breakdown of the old systems of family responsibility and alms-giving. This is worsening the position of the blind and, therefore, increasing the urgency for governments and the public to take action. Another aspect is that modern effort for the blind is passing out of the days of scattered voluntary societies into a new era when blind welfare, if it is to be effective, must be handled on a national basis.

Signs are not lacking that governments are fairly rapidly realizing their responsibilities. About twenty countries have asked the United Nations, or other bodies, to send specialists to advise them on the establishment of national services for the blind, and a number of them are in the process of implementing their recommendations. It must be confessed that the difficulties, even where governments are actively co-operative, are still very great. We have, for instance, a long way to go in instilling the right concept of blind welfare, which to some governments means granting mere subsistence to the blind in institutions, and to others that schools for blind children comprise the beginning and end of a blind welfare service.

Again, in some official circles, one meets the contention that it is futile to train the blind while unemployment is rife among unhandicapped people; and/or that the education of blind children, being particularly costly, should be postponed until all ordinary children are attending school.

Our answer to these contentions is, of course, that the blind have equal rights with other citizens and should share with them the general progress towards better conditions in education, employment, security and the enjoyment of life.

The purpose of this paper is to ask those who are or will be working for the blind throughout Asia and Africa, to make greater use of the lessons of the past, to recognize the difficulties which face us and to follow with real imagination the possibilities which lie to hand. With this end in view let us pass on to certain points of principle and practice which experience suggests we should be wise to follow.

It is an illusion to believe that governments alone and unaided can run fully effective services for the blind. The state must indeed participate in a big way, and it can, of course, administer parts of the service with great efficiency. If, however, the blind are to gain a happy and useful place in society, government and local authorities must have the help of the general public and must share with them the administration of the service. These are some of the reasons:

1. A government seldom initiates or positively develops services for the blind unless private citizens are keenly interested. Governments follow public opinion rather than lead it.

2. Private citizens continue their positive interest in the blind only so long as they share in contributing to and in administering the service.

3. The rules which necessarily govern matters of finance and procedure in state services are apt to preclude the use of initiative and imagination in solving the many problems attendant upon the blind. Departmental regulations are usually a brake on speedy action in exploiting opportunities in the fields of employment and commerce.

4. In serving the blind, state officials tend to follow the line of least resistance. They find it easier to give the blind a monetary allowance or merely to house them in institutions rather than go to the trouble of training and establishing them in employment.

5. In a country new to blind welfare, the vigor of a state service is subject to great variation according to the interest taken in it by the Minister or Secretary of the Department concerned. The best guarantee of continuing action is that it should be handled by an independent body set up for this service only.

In its attempt to serve the blind public philanthropy also suffers disabilities. Financially it is too weak to do all that is necessary; and frequently it lacks status and co-ordination. It can, however, tremendously supplement the standard contribution which the state should make. While its generous voluntary gifts of funds and property are of obvious value, its direct personal interest in the progress and achievements of the blind is, perhaps, of even greater importance. If a citizen feels that it is by his own assistance that the blind are being trained he will take an active pleasure in helping to place them in employment, in purchasing their products, in supplying them with the many amenities they need and in a thousand small acts of kindness, down to giving them a helping hand in the streets. His interest in a purely state service is usually half-hearted.

It seems clear, therefore, that we shall stand the best chance of achieving success if we draw upon both of the two great sources of aid which are open to us, that of the government and of the voluntary public. Each makes good the deficiencies of the other. Our aim should be to bring them together in a satisfactory working partnership.

The rendering of services to handicapped people is a new activity to most governments in Asia and Africa. In the past these have been reserved to religious bodies and to the kindly individual of town and village, and the more we can merge this old tradition into the voluntary side of the new partnership, the better we shall succeed.

In translating this principle of partnership into action, the first step is to set up a national agency as a statutory body upon

which should rest the absolute responsibility for the gradual building up of all services for the blind of the country. From the outset it should have the essential status for taking complete charge of this big job. People may argue that the early beginnings are so small that they do not merit so substantial an authority. This is a fundamental error. Should the initial body be a weak one or should several competing societies come into being, the ultimate difficulties will be trebled. The important thing is to begin with a sound framework into which each new department, each new unit, can be fitted as time goes on and increased resources become available.

The national agency becomes the recognized agent of governments and of the philanthropic public in carrying out this specialized service. State departments often feel in rather helpless ignorance as to how to tackle assistance to the blind and are thankful to have a national agency to which they can delegate the task. It is of value, too, to have a semi-official body to handle the financial and other aid which the government is willing to give, for the reason that in our modern world not one government department, but five or six, are interested in one or other of the many activities which the ultimate service embraces. Departments usually prefer to give their aid directly to the national agency rather than to channel it through another department. Similarly the voluntary public will support a strong single body with much greater confidence and generosity than it will several weak and competing societies.

The governing body should be an Executive Council of active people of manageable numbers, say of 11 or 15 members. Just over half of these should be elected by the voluntary contributors and the balance would be nominees of the government. It is imperative that the majority should be unofficial and voluntary representatives so that the independence of the national agency can be guaranteed and the public will not be in a position to say that it is just another government department.

Should there be blind people in the country qualified by experience of active work available to serve, one or two of these should be appointed to the Council; and, when a competent association of workers for the blind has come into being, it, too, should be represented.

The Executive Council is essentially the day-to-day administrative body; but it is desirable to give representation to many other organizations, districts and individuals. Accordingly the constitution should provide for a "General Council" with more or less nominal functions and meeting not more often than annually, to which representatives of this kind would be appointed.

As we have said, the main responsibility of the national

agency is the "gradual building up of all services for the blind of the country." This should be effected along the following broad lines:

If societies are already in existence, they should, by negotiation, either be merged into the new national agency or be given specific limited tasks under contract with the agency.

The national agency should begin its work by setting up the essential basic departments: first, its headquarters, from which is carried out planning, the stimulation of government and voluntary interest, research into the all-important policies of education, vocational training and employment, and creating an atmosphere of leadership and progress; secondly, to establish a range of model departments which, at the beginning, should be a primary school, a vocational training centre and a placement and after-care department.

Headquarters will decide the nature of the framework on which the national service will be built up. If the country is large, provincial and district branches with their own local headquarters should be established. Early decision should be made on this matter so that all local growth can fit into a sound administrative pattern.

The national agency need not itself directly carry out all the services. Its primary responsibility is to see that all necessary activities come into existence under a co-ordinated scheme, whether run by itself or delegated to other bodies. It might be agreed, for example, that primary schools for the blind should be conducted by the education department as part of its educational program; and it would certainly be the case that pensions for the blind, augmentation of wages or subsistence allowances would be provided by government or by local authorities.

In approaching this task we should divide the blind populations of most Asian and African countries into their present chief groups as follows:

1. Blind children under 15 years of age.
2. Trainable adolescents and young adults between 15 and 35 years of age.
3. Those over 35 years of age and the untrainable younger blind.
4. The habituated beggars.

In most countries it will be many years before resources make it possible to give anything like a complete service for every type of blind person. Accordingly it should be decided whether to spread available funds over all these groups or whether to concentrate upon a limited field. If the former, the resources will have to be spread so thinly that little in the way of satisfactory results could be achieved. I would recommend that for the first 20 years

the national agency should devote all its energies to groups 1 and 2.

In the meantime, groups 3 and 4 would, of course, be free to benefit under any general schemes which government, local authorities or others might put forward for the elderly, the infirm and the beggar groups as such.

As to the beggars, the broad experience of the pioneer societies has been that once a blind person has got begging thoroughly into his system he will seldom respond to training. It is a fallacy, therefore, to suppose that the establishment of a training service can soon solve the problem of the blind beggar. Only the consistent training of the present and the future younger blind and the provision of pensions or other form of subsistence for the unemployable can eventually banish the beggar.

In planning our training programs for the employable blind we must have regard to the main groups into which they divide according to their environments. As the populations of most of the countries concerned are from 80 to 98% rural in character, the largest group is that of the village and country blind. The second largest is usually that of the poorer urban blind. A high percentage of the families to which both these groups belong are illiterate or nearly so. The third and by far the smallest group belongs to families of the better and educated classes and these are, in general, the more responsible members of society. It should be recalled that while this position is gradually changing, a sharp distinction still exists in most of Asia and Africa between the occupations followed by those who have had a literary education and those who have not. The former usually consider that manual work lies altogether outside their sphere.

The following classifications and the recommendations based on them are not intended to imply class distinction as a principle, but only to underline the essential need to fit each individual for usefulness within the community to which he belongs. If this principle is adhered to, our whole task will be infinitely easier and less costly. The employable blind should be grouped as follows:

1. The ordinary village blind of the countryside.
2. The urban blind of the humbler classes.
3. Newly blind young adults who have already had a good education and/or have filled posts of responsibility in professional and city life, and the children of responsible educated people whether of town or country.

Our basic scheme should provide programs to equip the rural blind for country occupations, the humbler urban blind for suitable city jobs and those with an education background for the higher vocations. Cutting across this program at a later period, provision would be made to enable those of exceptional ability in

all three groups to pass on to the higher occupations. In the meantime, however, we should aim at getting our basic scheme well founded.

To attempt to train country children at this stage for higher vocations in the cities, most of which have not yet proved to be practicable outlets, would only be to re-enact the failures of the past. Blind boys from simple illiterate village families are under an enormous handicap if they are expected to make good in competition with educated city people. To estrange them from their families, tribes and communities and to bring them into cities in large numbers would saddle the national agency with insoluble problems and with endless expenditure in trying to find them employment, housing and subsistence. Moreover, life in crowded modern cities, many in tropical climates, offers little happiness to the country-born blind. Some other solution must be found and I think it can be.

In most of the countries in which I have worked, I find that few people have more than a superficial knowledge of how their blind people live. The investigator must go himself to typical villages and personally interview every blind man, woman and child. As well as the large body of helpless blind, he will always unearth a few who are active and useful. Most of the jobs which I have found them at are associated with cultivation—clearing scrub, grubbing the fields, weeding, cutting grain crops, threshing and winnowing, gathering coconuts, making dung cakes, herding cattle, milking, curing hides, making country rope, pumping water for irrigation, cutting firewood and sorting tobacco leaf. Some are the musicians, comedians and story-tellers of the countryside, while others are traders, dispensers of indigenous medicines and charms, fortune-tellers and shopkeepers. Occasionally you discover an unusual occupation, a man who has big practice in setting bone fractures, or a barber who, having lost his sight, continues to shave his customers.

A number of the women carry on many of the usual domestic tasks—cooking, cleaning the house, washing clothes, bringing up children, grinding grain, cultivating in the fields, spinning wool or cotton, milking, water carrying, making the traditional basketware and pottery.

It was in East Africa that I found this indigenous independence developed to the greatest degree; so much so, that among some agricultural tribes the majority of the blind women appear to secure husbands in spite of their blindness and at the same bride price as that paid for sighted brides. The Uganda Foundation for the Blind is largely building its training system on the ordered expansion of these indigenous occupations, setting up small-holding training centres at which young men and women

and adolescents will be taught the customary occupations of their tribes and family groups, rural and domestic. They will thus remain in their own social and physical environment and will not have to live away from their families in strange cities with different customs and language and removed from the traditional benefits of the family system.

In some areas the new industrial life is drawing fit men away from the country, creating a dearth of agricultural labor. Under these circumstances, blind people who can work on the land should find acceptance and greater security in their family groups.

(In regard to details of the African Scheme, references may be made to Mr. John Wilson, O.B.E., British Empire Society for the Blind, 121, Victoria Street, London, S.W. 1.)

From 20 to 80% of most rural populations are still illiterate and many years will pass before education becomes general. This fact makes governments reluctant to do much about the education of the blind, for the cost of educating each blind child is many times that of a sighted child. A large number of village children do not attend school, there being none to go to; and these children learn from their fathers the family trade.

Some counterpart of this village custom is, I think, what is needed as an interim measure pending the full transition of a country from patriarchal peasantry to the modern state. The national agency should establish training centres for boys and girls in rural surroundings, where the common tasks of the country village should be taught in conjunction with general knowledge, physical development, religion, customs and ethics. There is no objection to the teaching of the elements of a primary syllabus, vernacular braille, simple arithmetic and weights and measures, providing, and this is a very big proviso, that teachers do not yield to the temptation of carrying this to the point of a general literary education. In much of Asia and Africa, the child who comes to regard himself as a literary scholar is apt to lose all interest in humbler manual occupations. The whole essence of the scheme is to train country children for country pursuits. Government officials respond much more warmly to proposals of this kind than to those involving costly schools in the cities.

The humbler blind of the city should receive a primary education with emphasis on pre-vocational training. On leaving school they should pass into a trade training department for thorough instruction in locally proved occupations. This transfer should not be delayed beyond the age of 15 as it is essential both that the individual should earn as soon as possible and that educational and training costs should be kept low. Many schools in the past were cluttered with youths aged from 18 to 25, still sitting at their desks and getting nowhere.

Many school teachers in these continents, when asked what occupations they expected their pupils to follow when their school years were over, replied vaguely but with plenty of wishful thinking, that there should be prospects for them as typists, stenographers, masseuses, telephone switchboard operators, lawyers, piano tuners and so forth. In few cities, however, has any study been made of the practical aspects of these outlets and until this has been done and each has been proved to be sound, it should not be entertained. The total cost of training a blind child and of ultimately placing him in one of these occupations, is extremely high, so that failures should not be risked. Training for the higher vocations, when they have been proved to be sound, should be reserved for the younger adult blind with good education and practical working experience of the world behind them and, as a second group, the children of established city parents of good quality.

One of the major defects of blind welfare in these continents has been its almost total neglect of the newly-blind adult and adolescent, which at this stage should be taken broadly as covering the age group 15 to 35. So many among the laymen were under the impression that blind welfare began and ended with the education of children; and a contributory cause was that, where governments met part of the cost, it was on a per capita basis, finishing when the pupil reached the age of 16 or 18. The newly blind of the 15 to 35 age group is the one which can be rehabilitated most quickly, effectively and cheaply. Their inclusion also has the value that a more balanced, more mature community of the blind results. They have had their education in, and experience of, the ordinary world and have often worked at some occupation.

The training programs for the rural blind, the urban blind and the blind of a higher educational background, should each provide for the inclusion of the newly-blind young adult and adolescent in their respective vocational training departments. If in the case of the rural and humbler blind the young adult and adolescent is illiterate, he should not waste his time by sitting down to braille and other classroom studies but should get straight on with his occupational rehabilitation. If he himself should be keen to learn to read and write and to acquire a knowledge of braille, he should learn this in evening classes.

I am not opposed to the balanced use of braille but I find so consistently that braille instruction exerts such a fascination upon teachers of the blind that they go on and on with braille instruction out of all proportion to its importance. To some extent it is a line of least resistance; the main objectives of trade training and employment suffer in consequence.

Atrophied blind is the term which I apply to many neglected blind, particularly to the child kept by its parents sitting idly in a corner of the house for many years—no exercise, no little jobs to do, no playing with other children, often underfed, until its mind and feeble body are virtually atrophied. In most of the countries concerned, the blind populations are so large that years must pass before modern services can reach them all. Consequently, those among them who promise the best results from their training should be given priority. This is important because it is still necessary to convince governments and the public that expenditure on blind welfare is worthwhile. The investigator in a village can quickly tell which children should be recruited for training and which should not. The promising child will usually be one who plays with other children and does jobs about the home.

The layman ordinarily shows little discretion in selecting suitable children and adults to attend training courses. For this purpose the national agency should send out its own representatives to visit villages. A close liaison too, should be established between the national agency and the health service, particularly with respect to eye hospitals and clinics, in order to recruit the newly blind and to begin their training as soon as possible after their loss of sight. Most schools receive blind children at too late an age and a big effort should be made to get them earlier.

One result of following the western pattern too closely has been that many societies for the blind tend to import expensive raw materials; Singapore cane, for example, when cheaper alternatives grow within the country. Again, the society buys local materials already fully prepared for manufacture when the process of preparation could be carried out by the blind themselves. The preparing of reeds, rushes, withies and palm fibres are tasks which could be usefully organized for the rural blind who live in the areas where they grow.

Sometimes, when I have proposed this, the local society has objected that the rates of remuneration are so low that it would not be worthwhile for the blind to take on such work. This is a false doctrine, especially when the alternative to doing such work is total idleness. This may be part of the scholastic snobbery attendant upon over-literary education.

There is rather a fashion these days for proposing that all types of the physically handicapped should be grouped together for purposes of administration and service. It is a neat theory, but, where practice is concerned, each group can be properly served only by its own complete organization. Co-operation should mark the relationships of one with the other; but it is with normal society that we would wish our blind people to be associated. We still recall the unhappy results of bracketing service to the blind

and to the deaf mutes within the same organization, a situation which still persists in a number of Asian schools.

I should like to emphasize that this program is designed for the initial stage of founding a good and realistic service under *present* conditions in most Asian and African countries. The many specializations which the ultimate service embraces should be left until the basic system has taken firm hold and gained public confidence.

The following are the main points which I have put before you:

1. Each country to create its central national agency for the blind, representative both of government and of the voluntary public, to be in supreme charge of blind welfare.

2. A national framework to be established at the outset into which every future activity, federal and provincial, will find its rightful place.

3. All effort for a whole generation to be concentrated on developing the activities of the potentially employable blind.

4. Training programs to be planned at the outset in conformity with the environments of the dominant groups with special regard to the rural blind, the humbler urban blind and the blind from responsible and educated families.

5. The need to provide forthwith for the rehabilitation of the newly-blind young adult and adolescent.

6. Training for the higher vocations to be restricted primarily to the newly-blind young adult of the educated classes.

7. Studies to be made of the existing occupations among those which the rural and urban blind have already discovered for themselves as well as of additional possibilities.

8. Similar studies to be made of certain occupations which in some countries have been traditional for many generations: music, massage, the reciting of the Koran, for example, to see whether both by better training of the individual and by negotiations with authorities, the status and opportunities for these might be considerably enlarged.

9. Proper investigation to be made of the possibilities of establishing the blind in such accepted western occupations as typing, stenography, telephone switchboard operation, piano tuning and physiotherapy, to see whether these offer satisfactory outlets sufficient to justify the high cost of training and equipment.

10. Great caution to be observed in giving braille and literary education in spheres where, while inclining the pupil to despise manual occupations, offers him no real prospect of a higher vocation.

11. Trainees to be carefully selected, and the "atrophied" blind and the habituated beggar not to be recruited, nor any at-

tempt made at this stage to rehabilitate the deaf and mentally defective blind.

12. Better use to be made of local raw materials; and as far as possible the blind to carry out the preliminary preparation of raw materials.

TYPICAL PROBLEMS ENCOUNTERED IN ORGANIZING NEW PROGRAMS IN LATIN AMERICA

Dr. Andres Bustamente Gurria, Director, Board of Rehabilitation of the Handicapped, Mexico, D. F.

My country has been honored by an invitation to express before this conference its views on the problems of the organization of a rehabilitation program for the blind and the methods used in coping with such problems.

Although the title of my paper refers to Latin America, I do not feel that I have sufficient authority to speak of the situation as it exists in all Latin-American countries. I shall therefore limit myself to Mexico. Nevertheless, because of the obvious similarity of racial, traditional, cultural and language conditions in Latin America, it is my opinion that a situation resembling our own prevails in those countries trying to establish a program such as ours, and I hope that my talk will be of some value to them.

May I tell you, fellow delegates, that there are two main obstacles in our way, one relative to the human element, the other material. With regard to the first we are faced with:

1. Limited statistics showing the magnitude of the problem.
2. Lack of trained technicians.
3. Ignorance of the importance of rehabilitation of the blind, and a lack of co-operation among the blind themselves and society in general.
4. Non-existent or insufficient legislation for the protection of the blind.
5. Ignorance of methods of prevention of blindness.

Secondly we are faced with:

1. Insufficient economic assistance from the government to cope with the problem.
2. Lack of transportation facilities throughout the country.

These are the fundamental problems present in Mexico in the organization of a rehabilitation program for the blind as part of a general program of assistance to the disabled. Now I shall try to show what we are doing to meet these problems.

It is essential for Mexico, as for any other country, to rehabilitate its disabled citizens in order that they may contribute towards its economic development. As a result of this belief, our Government last year suggested that the Central Office of

Rehabilitation under the department of Public Health and Assistance, study the problem and prepare recommendations for its solution.

I believe it is the purpose of all attending this conference to pool their efforts for the welfare of the blind. My country extends its hand to all persons concerned with the rehabilitation of the blind. We have undertaken the rehabilitation of the blind as part of a general rehabilitation program of all disabled people. We have tried to combine the efforts of the government with those of interested organizations and individuals, so that we may draw upon resources that will enable us to widen the scope of our activities. The Central Office of Rehabilitation not only directs the official subsidiary organizations, but also co-ordinates the work of private institutions dedicated to rehabilitation.

The first step in the program was to estimate the number of blind persons in Mexico. In the year 1930, the Central Office of Statistics included in its general estimates some statistics relative to the disabled. However we considered these an insufficient basis for our program since not only the population of the country, but its industrial development, volume of transportation and other factors which could account for a larger number of disabled, were quite limited at that time. Before estimating the approximate number of disabled, an examination was made of accepted international statistics. Then a census was taken among 12,000 families in the capital.

We also have on hand statistics obtained by the Center for the Committee on the Evaluation of Aptitudes, one of our best official organizations. This office is in charge of evaluating the aptitudes of the disabled, through a study of their physical, economic, social and psychic conditions.

It is estimated that Mexico has approximately 35,000 blind persons. In Mexico the census is taken every ten years. In 1960 no doubt there will be a specific census of the blind as well as other disabled.

Our efforts to establish a successful rehabilitation program are hampered by the lack of trained technicians. The stimulation that rehabilitation received from the establishment of an official organization for this purpose made obvious the need for qualified experts in the field. In 1934 the Department of Public Education founded the Superior School of Special Education which included in its program the training of teachers of the blind. Neither the number of persons enrolled nor the course itself was adequate for our program. The course has recently been reorganized to meet the needs, and at an early date we shall have the necessary number of qualified experts.

There is a tendency on the part of society to pity the disabled, especially the blind. This public charity, which does not really help the blind, is one of the reasons why so many beggars roam our streets. Once they come into this category, they feel they are entitled to government and social protection. We are in need of a good public education campaign on a national scale, which will bring all social groups and the blind themselves to the realization that the disabled person is a useful member of society and that his aptitudes and abilities must be utilized. It must be realized that the blind should be appreciated for what they can offer and not depreciated for their disability.

Our program prepares publicity for radio, press and television; weekly publications, rehabilitation pamphlets and other means with the aim of bringing our philosophy to the attention of individuals and groups which may be in a position to pave the way for the employment of the blind.

Due to the Revolution of 1910, Mexican laws for the protection of the worker are very well established. These laws include accident insurance and other important factors in industry. They do not however provide for the great problem of the rehabilitation of disabled workers. The reason for this may be that Mexico has never had a large number of war disabled which would bring the problem to the attention of the proper authorities. Another reason may be that we have a small percentage of accidents due to the fact that our industries are modern and well advanced.

What we lack are good laws that would protect the disabled; laws that would contribute to their rehabilitation; laws that would make it easy for the disabled person to gain employment once he has proven his ability and will to earn a living. Such laws are at the present time under consideration by the Mexican Congress. Our plan is to have laws that will obligate the employer to co-operate with the authorities in setting up a fund that would provide for the rehabilitation of the blind person should his blindness be the result of an accident occurring at his place of employment. We want to have a law that would demand re-employment of the same person once he is able to work again. A law also should be enforced that would obligate employers to notify the proper authorities of every disability so that rehabilitation can be planned.

A large percentage of our blind children live in small villages where prevention of blindness is inadequate and sometimes unknown. In our country the Crede method of prevention of blindness is legal, but the lack of technicians and economic resources as well as transportation difficulties, especially among the working

class, make it impossible to extend the program. Consequently a large percentage of blind persons in this country are blind because of ophthalmia neonatorum.

Although this cannot be considered a particular problem in the rehabilitation of the blind, I think it should be of interest to all of us. Inflammation of the eyes of the newborn is the principal cause of blindness among Mexican children, and perhaps among children all over the world. In proportion, it is greater than any other cause. It is therefore true to say that children form a large percentage of the blind population. To disregard the problem of prevention would be to detract from the efficiency of our rehabilitation program.

Mexico is at present developing socially and economically, which raises a great many problems in its utilization of its human and natural resources. Its economic capacity is not sufficient to meet all its needs, among them the welfare of 35,000 blind persons. This problem of economic deficiency, which no doubt may exist in other Latin American countries, determines the amount of work which must be done by the government to cope with the problem. The Secretary of Health and Assistance in Mexico, Dr. Ignacio Morones, has given his wholehearted approval to our plan and has designated sufficient funds for its operation. It is now up to individuals to help us financially to establish pilot rehabilitation centers in the most important parts of the country in order that our program may become fully effective. The public must be appealed to.

Fortunately we have an adequately furnished center, the National Institute for the Rehabilitation of the Blind, with a capacity of 250 students and workshop facilities for 200. It has sufficient classrooms that are well furnished and dormitory accommodations for 120. Its braille books are distributed not only within the institution, but to other organizations throughout the country. The Institute is also taking care of the recreational aspect of the problem. It has a library, recreation rooms, music rooms, outdoor sports and other facilities for the blind.

We are assisted also by the National School for the Blind which was founded in 1880. The School has a capacity for 200 students, and also operates workshops. Many schools for the blind in the interior of the country receive assistance from this school in the way of braille books and technical aid.

In conclusion I wish to point out that a serious obstacle we face towards assisting the blind and other disabled persons is the vast territory to be served and the lack of adequate means of communication and transportation in some areas. This hinders the rapid transportation of technicians to needy places. The

Mexican government is at present constructing roads at the rate of approximately 3,500 kilometers annually. However it should be noted that we must cover 2,000,000 square kilometers where there are 28,000,000 people, many of them living in mountainous regions.

I have told you, friends, of the existing problems that must be overcome in Mexico in order that we may have a successful rehabilitation program. As these problems are solved, so will our program progress. We hope that we are doing our part towards a world-wide program for the welfare of the blind.

COMMON PROBLEMS RELATED TO WORK FOR THE BLIND IN LATIN AMERICA

Prof. Alejandro Meza, Mexico

(NOTE: This paper was originally delivered during the final session of the Assembly. However, because of the subject matter it is felt that it falls within the category being discussed at this session, and is therefore being included at this time.)

It is an unquestionable fact throughout the world that the blind constitute a minority group, and that the integration of this group into active and normal life is a serious problem which demands well-co-ordinated action on the part of the government and the general public. Although there are certain factors which appear to be essential in work for the blind, there are also certain geographical areas where the scarcity and inadequacy of such elements is a tragic reality. This is the case in most of the Latin American countries where services for the blind are either in the very elementary stages or still far from adequate. Because their ethnical backgrounds, political and social structures and their economic conditions are so similar, it is easy to see why a social problem such as work for the blind has similar characteristics and calls for similar policies, which could be successfully carried out internationally in a spirit of close co-operation.

Generally speaking, work for the blind in Latin America faces two main obstacles — the misconceptions of the general public towards blindness and the blind, and the lack of sufficient financial resources to provide essential education and rehabilitation services. This difficult problem, prevalent throughout Latin America, has compelled me to present the situation to your high judgment and to submit to your thoughtful consideration some practical proposals towards an immediate and substantial improvement.

The information presented below is the result of a survey which I have recently conducted in Latin America. The data is so reliable that I have no hesitation in including it here. As you know, only two South American countries, Colombia and Brazil,

are directly represented at this Assembly. This means that by adding my own country, Mexico, we have just three Latin American countries attending the Conference. For this reason I am convinced that we all must analyze the situation which affects many thousands of blind people living in Latin America.

GUATEMALA

• Work for the blind in this country was initiated only a few years ago with the creation of the "Comite Nacional Pro Ciegos y Sordo-mudos" (National Committee for the Blind and Deaf), which has functioned since its inception as a private organization. The Committee has, among other achievements, founded in Guatemala City the first and only school for the blind in the country. The Committee has instituted a "Week of the Blind" as a yearly fund-raising event, and has received a warm and sympathetic response. It also receives a government subsidy. Early this year (1954) the Committee established an industrial home for the blind where blind men and women receive rehabilitation and training services. The industrial home is a fine example of this type of service and possesses the most modern equipment. Unfortunately the number of persons who can benefit from the services of the committee are relatively few in comparison with the entire blind population of the country.

NICARAGUA

Very little is being done for the blind people of Nicaragua. A few years ago instruction for the blind was being given in a "School of Special Teaching," but this has since been discontinued. At present in Managua, a few blind adults are receiving instruction in braille and elementary subjects in quarters provided by the Ministry of Education with basic equipment supplied by the local Lions' Club. It has recently been announced that a campaign on behalf of the blind will be held under private auspices.

CUBA

It is estimated that there are 6,000 blind people in Cuba. Almost all the work on their behalf is due to private initiative, though several of the organizations, principally the "Varona Suarez" School for the Blind, receive some financial assistance from the government. As a result of persistent efforts on the part of Dr. Zacarias Alvisa Giraud, Sr. Enrique Berenguer, Dr. Blas Perez, S'ra Esther Ayala Hernandez and others, a private committee was organized a few years ago. The work of the committee has resulted in the establishment of a braille circulating library, the acquisition of a modern embossing plant and the

creation of an Industrial Home for the Blind which serves as a rehabilitation center. The committee is strongly supported by the Lions' Club and has been promised a grant of \$300,000 from the government towards the industrial home. Plans are underway towards the creation of a National Council for the Blind whose main objectives will be to promote the enactment of legislation in favor of the blind and to initiate a national program for the education and rehabilitation of the blind. Dr. Alvisa Giraud sends the greetings of his organization to this Assembly.

ECUADOR

There is no information available about the blind population of this country. In 1937 the government founded a small school for the blind which was transferred to the Red Cross in 1945. Unfortunately lack of technical personnel and other causes were responsible for the failure of this pioneer institution. At present the government maintains two schools for blind children, one in Guayaquil and one in Quito. All services for the adult blind are due to private initiative. Due to the efforts of a committee of distinguished women, co-ordinated action on behalf of the blind is being carried out through public and private effort.

PERU

Educational services are available to a limited number of blind children and adults in Lima and a few other cities. For the most part these activities are carried out through private initiative with some assistance from the government. A braille printing plant and library are maintained in Lima, but the number of persons who benefit is relatively small.

ARGENTINA

Because of its enormous economic potential, Argentina is carrying on a number of activities on behalf of the blind. There are several well-equipped schools for the blind, two large libraries and two modern embossing plants which regularly produce important braille literature including two magazines. The government provides for educational and social services for the blind. However private initiative has contributed greatly to fostering the promotion and improvement of the welfare of the blind. Numerous blind people are gainfully employed, not only in the professions, but also in commerce, industry and other fields.

COLOMBIA AND BRAZIL

Our distinguished colleagues, Sr. Pardo Ospina and Sr. Espinola Veiga have full authority to speak for their respective countries. However it is gratifying to report that in Colombia and Brazil activities for the blind are becoming increasingly intensified.

MEXICO

In my country the Department of Rehabilitation is establishing an adequate program for the education of blind children based on truly scientific principles, and for the rehabilitation of adults by applying modern concepts and practical measures. The Ministry of Public Education maintains the Normal School of Especialization which has an excellent program of training courses for teachers of the blind. The Junior League of Mexico City is also carrying on important projects and rendering services of great value to the blind.

OTHER COUNTRIES

Very little is being done for the blind in the rest of Latin America although interest in the welfare of the blind has recently begun to become apparent.

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The foregoing indicates that even in those Latin American countries where work for the blind has reached a somewhat advanced stage, there is still much to be done. The political, social and economic conditions existing in these countries are similar in many respects, so that common problems naturally arise in connection with work for the blind. To solve these problems it is most desirable that national programs be co-ordinated on the principles of reciprocal and full co-operation. It is necessary to follow unified policies in a consistent and systematic struggle against the misconceptions of society towards blindness and the blind, to encourage private initiative and to arouse government interest in behalf of the blind. To reach these high objectives I propose:

1. That a formal invitation be extended to all non-member Latin American countries to apply for membership in the World Council for the Welfare of the Blind.

2. That the World Council for the Welfare of the Blind recommend to all Latin American governments that legislation in favor of the blind be enacted covering as a minimum a) compulsory education for blind children; b) education and rehabilitation of blind adults; and c) financial assistance to unemployable and needy blind.

3. That the World Council for the Welfare of the Blind use its growing influence to encourage in all countries, private initiative in behalf of the sightless.

4. That the World Council for the Welfare of the Blind offer, to the extent of its resources, technical assistance and advice wherever requested and needed to aid the cause of the blind.

5. That the World Council for the Welfare of the Blind sponsor a regional union of institutions and organizations for the blind of Latin America, provided that union is based on principals of reciprocal aid and full co-operation.

I am certain that such action on the part of the World Council will constitute a decisive factor in reaching our ultimate goal to liberate the blind from the shadows of ignorance, to give them dignity through education and work and to integrate them to full citizenship. Let us bear in mind that in the middle of the twentieth century the great majority of the blind in Latin America are still living in the most deplorable conditions of intellectual, moral and economic misery, and in a situation of social ostracism.

TYPICAL PROBLEMS ENCOUNTERED IN ORGANIZING NEW PROGRAMS IN INDIA

**Capt. H. J. M. Desai, Honorary Secretary, National Association
for the Blind, Bombay, India**

Mahatma Gandhi, the Father of the Indian Nation, used to say that the service of the Daridranarayana, which term included the handicapped, the poor and the needy, the down-trodden and the economically and socially backward groups, was the highest Dharma, or religion, in the world. To you all, my worthy colleagues, who have such splendid records of service to the visually handicapped, I convey the salutations of India.

Because of the poverty of India and its very large population, all social problems are of colossal magnitude. The problem of the 2,000,000 blind in India, scattered over a vast sub-continent, speaking different languages and having distinctive cultures, is one with equally gigantic proportions. Welfare services exist for barely 1,500 visually handicapped. Nearly ninety percent of blindness is estimated to be preventable and another five percent curable. The incidence of blindness is as high as 500 per 100,000 of the population.

The government of India is fully alive to the magnitude of these problems. Under the inspiring leadership of our beloved Prime Minister, Pandit Jawaharlal Nehru, much progress has been made in recent years. Of course, much yet remains to be done.

The government of India Report on Blindness in India prepared in 1944 remains to date the latest information on which programs can be based. This is the most authoritative and exhaustive document available on the subject. It was framed by a Committee of Experts. The Committee had the benefit of guidance from an internationally known expert, Sir Clutha

Mackenzie, the principal speaker for this evening's session. The visually handicapped in India owe a deep debt of gratitude to this great and noble crusader in the cause of the welfare of the blind, not only for framing this excellent report, but for his ceaseless efforts in evolving a World Braille Code on which Bharati Braille is based.

The report referred to lays great stress on setting up an All-India body — an Indian Council on Blindness — with branches in all the States. The role of this body will be to marshal the available resources of service, money and goodwill for the betterment of conditions among the blind, and to expend them for the greatest good of the greatest number. Only three States have so far established such Councils. If the optimum benefits are to be derived from the limited available resources and if planned progress is to be assured, it seems imperative that the Council should become active as soon as possible. Such a Council should be headed by a Minister of the Central and the State governments, preferably the Minister of Health or Education, and should have adequate non-official representation. This organization should be responsible for obtaining adequate finances and for building up a service to the blind throughout India. The absence of such an organization greatly hampers the organization of new programs in India.

The second main difficulty is the lack of adequate financial resources to effectively tackle the problem of the two million blind scattered over a sub-continent. My humble opinion is that it will be impossible to organize our blind welfare services on modern progressive lines covering all age groups of the blind as well as the blind with other handicaps if we are to depend on our own financial resources. This is obvious from the gigantic nature of the problem. I am sure this World Assembly aims at the emancipation of the blind throughout the globe. With all the earnestness at my command, I would plead that it use its good offices to secure for us the maximum financial assistance from international agencies and also from private charitable foundations and trusts.

The greatest possible stress must be laid on the prevention of blindness. Nearly ninety percent is estimated to be preventable. The incidence of blindness is, with the possible exception of Egypt, the highest in the world. Success in this field can be achieved only when a well planned propaganda and publicity campaign is organized on a nation-wide basis.

Unfortunately the sighted public is also not adequately informed or educated to a clear understanding of the capacities

of the blind to become useful and contributing members of society. The achievements of the blind in other progressive countries must be greatly publicized. The potentialities of the blind should be brought to the attention of and recognized by the sighted public, particularly employers. This lack of understanding greatly restricts progress.

Similarly, the staffs of the institutions for the blind and the large number of volunteers working for the cause must be trained in the latest methods and techniques in modern blind welfare. In this matter India will greatly appreciate any fellowships or scholarships which any country may offer for training our blind welfare personnel. A centrally situated training center in India for conducting such training appears an imperative necessity.

Pilot projects — setting up models to be followed by schools, vocational training centers, workshops, employment and placement services, etc. — can greatly accelerate the pace of progress. Intensive observation of such model institutions and emulation of their work will be a real boon to the existing institutions, some of which are stagnating for want of new and progressive ideas.

Employment of the blind has been greatly neglected in my country. It is most essential to fit the education and training of the blind to their future employment. The employer needs to be educated to the capabilities of the blind. The blind could be usefully employed at simple repetitive jobs at which they give full economic value for the wages paid to them.

Another difficulty encountered in India is the lack of adequate books in braille in the major regional languages. It is imperative that the Central Braille Printing Press at Dehra Dun print books in all regional languages, and greatly speed up its production program. Perhaps additional Solid Dot Braille Printing Machines at Bombay, Calcutta, Madras and Lucknow would accelerate the pace of progress.

Braille libraries will have to follow the establishment of braille presses. Personally, I would lay greater stress on the vocational training of the blind rather than on literary education, provision for which should of course exist for the intelligent blind. It also seems essential to create a central department for the provision of apparatus and appliances required by institutions and individual blind persons.

No legislation exists in India to promote the welfare of the blind. Countries which have introduced such legislation have made great progress. In all humility I would suggest that the World Council recommend to all countries the minimum program on which legislation could be introduced, of course keeping in view the limited available financial resources.

Friends, the above gives in a nutshell the difficulties and problems encountered in organizing blind welfare services and new programs in India. The problem is so gigantic and the funds available at our disposal so limited, that without the co-operation of international agencies and others interested in the universal emancipation of the blind we cannot hope to put our blind welfare services on a plane with those in the United Kingdom or the United States for at least a generation to come. In our humble efforts we seek the Blessings of the Almighty and your very active co-operation and assistance.

WHAT ASSISTANCE IS AVAILABLE FROM INTERNATIONALLY CONSTITUTED ORGANIZATIONS

**Eric T. Boulter, Field Director, American Foundation for
Overseas Blind, New York, New York, United States**

Unlike the papers which are being presented by most speakers of this Conference, my task is not to stimulate discussion on the basic philosophies of our service to the blind, but rather to bring to the attention of all concerned the various international services and facilities that might be made available to those responsible for organizing and administering such services. The very fine papers which have preceded mine during this session have eloquently described the pitiful condition of blind people in many parts of the world, and I, therefore, do not propose to dwell on that subject. I feel, however, that it behooves us all as persons dedicated to the service of the blind to avail ourselves of all the assistance which sympathetic governmental and non-governmental agencies have made available to us so that the bitter problems which now confront so many blind men, women and children may be speedily overcome.

It has been rightly pointed out that work for the blind commences not with the establishment of schools or workshops, but in the operation of programs designed to prevent blindness through the eradication of its causes, the provision of medical facilities for the early treatment of conditions that might lead to blindness and the extension wherever possible of surgical and other facilities for the total or partial restoration of vision where blindness has occurred. I think we would all agree that these are areas which have in the past received insufficient attention from workers for the blind or other groups which operate more extensively in the medical field. During recent years, however, encouraging progress has been made, and at this time several international governmental and voluntary organizations are commencing to tackle the problem seriously.

Special mention must be made of the fine work of the World Health Organization. At first glance many of the services which

the Organization maintains appear to bear little relationship to the problem of blindness. Yet most of us who have traveled extensively in underdeveloped regions can bear witness to the fact that WHO, through the operation of its maternity and child welfare, mass vaccination and inoculation, venereal disease control, cholera, and other programs, has indeed made a major contribution to the elimination of diseases and epidemics which in past generations have led to an unnecessarily high incidence of blindness in many lands. WHO in partnership with the United Nations Children's Fund has recently come to grips with trachoma, the dreaded scourge which has afflicted whole populations, often leading to total blindness. Active programs are now being maintained by WHO and UNICEF with the co-operation of local governments in Tunisia and other North African territories, the Middle East and on the Island of Formosa. Splendid results have already been achieved and it is to be hoped that the work will be continued and extended. If this is to be done it is our responsibility to draw the attention of our governments to the need and to use our influence toward insuring their support for the operation of WHO and UNICEF programs designed to meet that need. Similarly, we should lend our full support to the work of the Food and Agricultural Organization, another vital member of the United Nations family, which through its practical work towards raising the general standards of nutrition in less-developed countries is also serving as an active partner in the battle against blindness.

In the speech which he delivered last Friday during the session devoted to the prevention of blindness, Mr. John Wilson told us something of the work recently instituted by the British Empire Society for the Blind towards the elimination of unsanitary and other conditions which could breed blinding epidemics, and the provision of medical facilities designed to restore or improve sight. Naturally, the work of the BESB must be confined to the Colonial and other territories which are administered under British jurisdiction. Nevertheless the work that is being accomplished and the startling results being achieved by this vital young Society are of interest to all of us and should spur us to encourage the launching of similar programs elsewhere.

Recently, the American Foundation for Overseas Blind, which organization I am privileged to represent here, has accepted responsibilities for operating a pilot project on the Chinese Nationalist Island of Formosa, designed to reduce substantially the prevailing high incidence of blindness. Ophthalmic departments have been created in three of the country's largest hospitals, eye clinics have been established as carefully selected centers in the high mountainous regions, and two mobile units carry doc-

tors, nurses, drugs, and operating equipment into the isolated villages to serve the aboriginal population. Regular training courses are provided in elementary sanitation, hygiene and care of the eyes, to responsible town and village representatives who, on completion of such training, return home to preach the gospel of prevention and sight conservation to their townsfolk. We of the American Foundation for Overseas Blind will be delighted to share the knowledge gained by our experience with any who may be interested, and I feel confident that the BESB will be equally ready to provide advice and guidance.

Over and over again in our discussions at this and earlier conferences, we have heard of the difficulties being faced by those organizations which wish to expand their programs, but who are restricted by the nonavailability of trained workers. It is similarly evident that in many countries those who now maintain programs for the blind have found it difficult to keep pace with the improving techniques being developed in other lands. Widespread recognition has therefore been given to the problem by a number of groups which regularly extend fellowship and scholarship opportunities to qualified workers for the blind, allowing them to observe and study general or specific aspects of service to the blind in more progressive countries. The United Nations has already made many such awards, the Technical Assistance Administration working closely with the Rehabilitation Unit of the Social Welfare Division in the selection of candidates and with governments and national organizations for the blind in the host countries. More limited opportunities are available from time to time from other organs of the United Nations within the specialized areas served by them. For instance, the International Labor Organization periodically grants study awards to persons wishing to specialize in vocational guidance, training and employment particularly for the physically handicapped, including the blind. WHO, too, has made useful contributions in this field by assisting ophthalmologists, through periods of observation abroad, to become familiar with new surgical methods, the improved use of antibiotics, and treatment by electrolysis. Occasional opportunities for the training of doctors and nurses in the field of eye care are being provided by certain nongovernmental organizations, outstanding among which are such groups as the World Medical Association and the International Council of Nurses.

The United States and United Kingdom governments have given a fine lead in encouraging programs of teacher and student exchange and providing facilities for overseas technicians and social workers to observe the latest developments within their areas of interest in the United States and United Kingdom. The Fulbright and Smith-Mundt exchange and study programs which

are administered by the State Department have provided the means by which a large number of foreign students have spent some six months to two years in the United States for the purpose of becoming acquainted with that country's services for blind people. In a few instances the undertaking has had a two-way effect with American workers taking up the posts temporarily vacated by the visiting students. In this manner the schools and agencies concerned have been able to learn from each other with strikingly beneficial effects on both organizations. Full details of the requirements of these schemes can be obtained from the responsible officer at the United States Embassy or legation in your respective country. Should your agency be located in a city other than the capital of your country I feel sure that your local U. S. Consulate can direct you to the source of full information. The British Council serves as the agent of the United Kingdom Government in such matters, and its constructive help has been extended to many students both blind and sighted, leading to their admission to special training courses for blind welfare workers which have been set up in Great Britain. British Council offices exist in many countries around the world, and I feel that some of you doubtless wish to explore the opportunities which may be available to you through their operating programs.

I wish particularly to draw your attention to the carefully planned study programs which are regularly operated in the United Kingdom through the friendly co-operation of several leading national and regional organizations. The existing program provides study opportunities for persons wishing to specialize in a) education of blind children, b) general blind welfare administration, c) home teaching. A strong committee has been created with responsibility for receiving requests from overseas agencies and students, making selection of those trainees who appear likely to gain most benefit from admission to the courses, and providing overall guidance and assistance throughout the training period. The committee is composed of Mr. E. H. Getliff, Mr. J. E. Jarvis, Mr. J. F. Wilson, and Miss Spencer-Wilkinson. Training, depending upon the subject being studied, is provided in the following places: Bristol, Edinburgh, Birmingham, Doulton House. The students or the agencies by which they are employed are generally required to cover their maintenance expenses and pay a nominal tuition fee. All applications should be submitted in writing with full details of purpose for which training is required and complete details of the student's background, education and experience, to Mr. E. H. Getliff, College of Teachers of the Blind, Westbury-on-Trym, Bristol, England.

A number of special training courses for teachers of blind children exist in the U. S. and most of them are able on occasion

to arrange for the admission of foreign students. Many of you will be familiar with the generous service extended during past years by Perkins Institution for the Blind, the New York Institute for the Education of the Blind, and other training agencies. In some instances these schools are able to provide full scholarships by negotiation with the requesting students or agencies. More frequently, however, such projects are organized through co-operation of other American organizations. The John Milton Society has made a number of grants to assist students to enter recognized training courses. It should be borne in mind, however, that the Society is authorized to assist only those organizations which are operated under Protestant-Christian auspices. Providing this limitation is observed, I know that the Society, through its director in New York, Dr. Dwight Smith, will be pleased to consider any applications you or your agencies may submit. The AFOB is extremely active in this field, and has provided assistance in varied forms to large numbers of visiting students. In many instances cash grants have been made to cover traveling or maintenance expenses, while the services of our consultants in the preparation of suitable study plans is made freely available to all. In this respect AFOB works as a national co-ordinator in maintaining close contact with international and national groups such as the United Nations and the U. S. State Department and with the many voluntary organizations which can most effectively extend the desired services.

Another method frequently used for the purpose of acquainting national and local organizations with modern advances achieved elsewhere is the provision for short or extended periods of the services of expert consultants. Here again I know that many of you have learned of the contributions so made by the UN and some of its specialized agencies. During recent years UN consultants have served in many countries and have helped outstandingly towards the welfare of the blind in those areas. During the present year such consultants have been or are at work in Egypt, Iraq, Pakistan, and Yugoslavia. The International Labor Organization has provided the consultant on vocational guidance, training and employment to the Middle East Demonstration Center for the Blind now being operated in Cairo under the joint auspices of the UN and the Egyptian government.

The AFOB and the BESB through the operations of their permanent staff members and the short-term employment of special experts, regularly extend on-the-spot consultant service to governmental and voluntary organizations for the blind throughout the world. As you know the AFOB program is a world-wide one and as far as resources will allow we endeavor to meet the need where it appears to be greatest. During the current year

AFOB consultants have served in several countries of the Far East, Latin America and Europe. BESB consultants have been most active in the Caribbean region and several territories of East and West Africa.

Mention of the ILO's service to the Middle East project leads me to mention another activity of this important specialized agency of the UN. As we are all aware, one of the most difficult problems that confronts us all is the provision of adequate employment opportunities for our blind people. Similar problems are faced by other categories of handicapped individuals and special attention has recently been given to the matter by the member nations of ILO. At its recent meeting in Geneva the ILO general conference set up a fully representative committee for the purpose of preparing all embracing recommendations for submission to the world's governments as a guide towards the operation of national programs for the vocational rehabilitation of the handicapped including the blind. The program then prepared and since approved in principle by the full conference will, if finally adopted in its present form, bring clearly to the notice of the world's governments and peoples not merely the pressing need of the handicapped for specialized service, but also a well conceived and highly detailed plan to meet such need. In the strongest possible terms I urge you all to get in touch with the appropriate departments of your governments in order to insure that they will lend their full weight to the acceptance of the ILO recommendations and their subsequent implementation. If this is done we may hopefully anticipate major developments in this all-important field of service.

There is an ever-existent need for the the widest possible dissemination of professional literature on all aspects of blind welfare work. A number of national organizations, including the American Foundation for the Blind, the Royal National Institute for the Blind and some of the French and German agencies regularly publish such material in the form of monographs, professional periodicals and special bulletins. Such material in many cases reaches readers in all parts of the world, and the advantage gained by those recipients doubtless has considerable effect on the efficiency of their own programs. I think we would all agree, however, that insufficient attention has been given to this important task, and I would urge the presently producing organizations to endeavor to expand their production. Other agencies which could make a contribution but which are now not doing so, might search their souls to determine whether such production might be commenced. Equally important is the need for all who seek to keep abreast of modern trends to approach those groups which can supply helpful literature.

At this point I should insert a word of caution. The great weakness of all the programs I have described—scholarships, fellowships, consultants, the dissemination of professional literature, and so on—has been the often-displayed inability of recipient organizations and individuals to apply wisely the information they have received to the conditions which exist in their own countries. It is useless to expect that a scholarship student returning home after a period of training in an excellently equipped and highly endowed institution abroad could immediately duplicate such an institution in his own country. It would furthermore be true to say that in most instances such an institution would not meet the needs of the new country, for it has been specifically designed to fit logically into the social, economic and cultural environment in which it exists. Thus, I would firmly request that all who study abroad or who gain information from printed matter published in other countries give very careful thought to the particular needs and circumstances of the blind people whom they have been called upon to serve, and endeavor to relate the guiding principles they have gained through study of the background in which their blind people must live and work.

Gaining knowledge after the methods that should be used in the operation of functioning programs is all-important, and for that reason I have devoted most of my time to a description of the assistance that is available to that end. It is recognized, however, that in many instances the material means by which such programs can be operated are not fully available. Often the basic equipment essential to the operation of any specialized program may be unavailable within the country concerned. Often, too, the funds for their purchase cannot be found. While it would obviously be impossible for any international organization to hope to undertake full responsibility for equipping and maintaining an overseas educational or welfare program, there are available certain international programs through which limited financial material assistance might be obtained. From time to time the UN through its technical assistance administration has provided special appliances to requesting governments, mainly upon the advice of visiting consultants. In the non-governmental field the most important contribution has been made by AFOB, which devotes a considerable proportion of its budget to such tasks as the establishment of braille printing plants, the provision of educational instruments and materials, and the donation of tools and appliances for use in vocational, recreational and general welfare programs. It is my understanding that in certain instances the Royal National Institute for the Blind is also able to consider requests for assistance of this type.

Here then are some of the facilities which are open to us and

which, if properly exploited, may assist us to become more competent workers for the blind and to extend the scope and effectiveness of the services which we have been called upon to administer. Let us return to our countries determined to investigate all these opportunities and to draw upon their resources for the greater service of the world's blind people.

SUMMARY OF CURRENT UNITED NATIONS ACTIVITIES IN FAVOR OF THE BLIND

A. Van der Goot, Special Assistant to the Director, United Nations Division of Social Welfare, New York, New York, United States

Since its beginning, the United Nations has attached great importance to the problem of the social rehabilitation of the physically handicapped, including the blind, and in 1946, this question was considered by the Temporary Social Commission. Resolution 58 (1), adopted by the General Assembly in December, 1946, instructed the Secretary General, *inter alia*, to provide advice, demonstration and technical equipment for rehabilitation to governments requesting this service. Soon, however, the requests for assistance outgrew the provision of this type of service and it became apparent to the Social Commission that a new approach to the problem was necessary.

An important influence in the development of the United Nations programme for the blind was the International Conference of Workers for the Blind held at Oxford, in August, 1949. The resolutions adopted at this Conference, embodying a basic programme for blind welfare work and recommendations for international action, were submitted to the Social Commission at its fifth session. At this session, the Social Commission requested the Secretary-General to plan with the interested specialized agencies and in consultation with non-governmental organizations a co-ordinated international programme for the rehabilitation of physically handicapped persons, including the blind. To implement this request, preliminary discussions were held between the United Nations, ILO, UNICEF, UNESCO, UNRRA and WHO, and a plan for practical action was agreed upon. This plan recognized the need for the development of an integrated and co-ordinated programme comprising all phases of treatment and rehabilitation of the physically handicapped. It recommended the provision of technical assistance to governments under Resolution 58 (1) and other available sources, the expansion of facilities for the dissemination and exchange of information on all aspects of rehabilitation, and called for the engagement of staff to initiate this programme. In the spring of 1951, the rehabilitation unit of the Division of Social Welfare came into being.

To ensure co-ordination of the activities of the United Nations and the specialized agencies, a technical working group on

the rehabilitation of the physically handicapped and for the blind which were approved by the Economic and Social Council at its 14th session.

These programmes call for special attention to the less developed countries of the world where work for the handicapped has not yet begun or is in its infancy. Plans for assistance to these countries must be considered in the light of their economic and social structure. For example, in a village, where the population earns little and must struggle to secure the mere maintenance of existence, efforts to improve the lives of the blind must be directed towards training them to take part in village activities, perhaps to learn handicrafts useful to village life, to grow their own food, to help in the housekeeping. Such training must be realistic so that the blind may become useful members of their family, tribe or nation.

This concern for the less developed countries brings us to the more concrete activities of the United Nations. The United Nations Technical Assistance Programme provides assistance in many fields, and necessarily our efforts in any one field are not extensive. It must also be kept in mind that such assistance is rendered only upon the request of Governments. In the welfare of the blind, the United Nations has assigned experts to twelve countries so far to survey the needs of the blind and assist the governments to plan realistic programmes for their education and rehabilitation. In this work, we have been most fortunate in having the valuable assistance of such highly qualified experts as, for instance, Sir Clutha Mackenzie, who was extremely helpful in surveying conditions and planning work for the blind in the Far East. The countries he visited were Turkey, Ceylon, Indonesia, Malaya, Singapore, Burma, India and Pakistan. The other countries which received expert advice are Italy, Guatemala, Iraq and Yugoslavia. The Fellowship and Scholarship Programme provides for the training of personnel; to date, 37 awards have been made in the field of services to the blind. We often tie our fellowship programme in with the projects we have at hand. Thus, three fellowships were granted in order to provide the Egyptian Demonstration Centre with appropriate staff, and after the programmes for the blind in Turkey have developed, partly due to United Nations aid, we are going to train seven Turkish students in various fields of work for the blind. One of the best and most realistic ways of promoting rehabilitation is by the establishment of demonstration centres to show what can be achieved by a comprehensive rehabilitation programme and how it should be carried out. The first demonstration centre for the blind, set up with United Nations assistance, was opened in 1953 in Egypt. This centre is located in Zeitoun, about six miles from Cairo. The

buildings, provided by the Egyptian Government, can accommodate 128 blind pupils and 16 trainees in work for the blind. There are dormitories, classrooms, a recreation room, dispensary and library, and an assembly hall which also serves as a lecture room and gymnasium. The centre also operates a braille printing plant which in time should be able to supply braille books to the blind of all Arabic-speaking countries. The United Nations has provided the braille printing plant and special educational and vocational training equipment. The United Nations has also assigned two experts, Mr. Arthur Magill, of the Canadian National Institute for the Blind, to organize and administer the centre's programme at its beginning; and Miss W. Gwyneth Wallis, formerly of the Southern Regional Association for the Blind in England, to establish a home teaching department which operates from the centre. It is hoped that home teaching, adapted to living conditions in Egypt, will be of great value by helping and teaching the blind in their homes and demonstrating their capabilities to their families and neighbours. The first home teachers trained at the centre have been sent to rural and urban areas and have already achieved encouraging results from their visits to the blind.

The International Labour Office has assigned a vocational training expert, Mr. Walter Wagner of Germany, to establish and direct the vocational training department of the centre at its beginning.

It is intended that the centre will serve not only to educate blind Egyptian children and give them vocational training, but also to train administrators, teachers and other workers for the blind from Egypt and other Arab-speaking countries. We believe that such training in a familiar environment and based on the needs of the Middle East will prove far more practical than training received in the West, and will be far less expensive. The centre expects to receive its first trainees from several Arab States this fall.

The League of Arab States is keenly interested in the centre and the opportunities it will offer to improve blind welfare work in the Middle East.

The resolution on which our rehabilitation programme is based states that it is to be developed in consultation with the interested non-governmental organizations. The assistance the United Nations has received from the non-governmental organizations has been invaluable in the field of welfare of the blind as in other fields. It has taken many forms; for example, assistance in the recruitment of experts, the preparation of publications, the preparation of study programmes for United Nations fellowship holders, and many other ways. I should like to mention particularly the American Foundation for Overseas Blind which has joined the

United Nations in several projects in addition to carrying out its own programme. Just to give one example of the many, when the United Nations supplied the School for the Blind at Ankara with a braille printing plant, the American Foundation for Overseas Blind provided the school with some very much needed educational equipment. To guarantee the non-governmental organizations a voice in the development of the rehabilitation programme, the United Nations has called two conferences and a third conference will be held this fall in Geneva, in order to secure the views of the interested organizations on the rehabilitation programme and the matters to be taken up by the Technical Working Group. In this way the United Nations and the specialized agencies may benefit from the broad experience and knowledge of the voluntary organizations which have been active for many years in this field.

RESOLUTION VIII

The World Assembly of the World Council for the Welfare of the Blind, resolves that, in collaboration with international leprosy organizations, the Council should investigate the extent of blindness amongst lepers and should advise on means by which organizations for the blind could assist the rehabilitation and resettlement of blind persons cured of leprosy. (See also Resolution I, page 58.)

EIGHTH SESSION Tuesday Morning, August 10, 1954
20TH CENTURY VOCATIONAL HORIZONS—
THE BLIND AS EMPLOYED CITIZENS

**Chairman: Hans C. Seierup, Director, Dansk Blindesamfund,
 Copenhagen, Denmark**

An acquaintance of mine once said, "It is not a misfortune to be blind, it is merely unpractical."

This sentence sounds well and seems to be all right but, nevertheless, it is wrong. For the overwhelming majority of blind people, blindness is a misfortune, and even a great misfortune. It is a hard blow to lose one's eyesight, but still harder to be forced to spend one's time in a chimney corner doing nothing, even if the public is paying for the fuel.

We realize that not all who are blind can hold a job. Some are able to do a job one hundred percent, and consequently should be given the necessary education, training and employment. Some can only be employed in sheltered workshops, and they are therefore entitled to expect such workshops to be established. Finally, there is a third category, namely, those who can only be employed on homework. Here again, quite a number can handle jobs which can only be described as "therapy."

While it is fortunate to obtain a job fitting one's abilities and talents, it is equally unfortunate if a person is forced to do a job which he cannot master because he lacks the necessary abilities or talents. Therefore, we should not strive towards the objective of having all the blind placed in open industry in equal competition with the sighted, but our target should be to have people employed in occupations commensurate with their abilities.

Everyone has the right to work and to free choice of employment. This has been promised us in the United Nations Universal Declaration of Human Rights of December 10, 1948. But how many people have as yet arrived at that point? In times of high employment we have opportunities; in times of high unemployment we do not. Society first and foremost considers the unemployed, but who are the unemployed? Should not everyone without a job be called unemployed? Is not a blind industrial worker without a job just as unemployed as a sighted industrial worker?

Bygone generations gave their support to the blind out of charity. Nowadays, help is given out of responsibility. But the next generation will help not only out of responsibility, but also because it is most sensible to do so. Rehabilitation and employment of the handicapped including the blind is an economical investment which Society cannot afford to ignore. In the Atlantic Charter we have been promised social security. But social security is not exclusively economic provision; it also means employment.

We all know that neither the promises laid down in the Atlantic Charter nor in the UN's Universal Declaration of Human Rights have yet been fulfilled. But we have come together at this time in order to ascertain how far we have progressed, what has been accomplished and what still remains to be done. We have met here today in order to discuss this important problem, and I bid all speakers as well as the audience a hearty welcome.

PARTICULAR PROBLEMS THAT CONFRONT WORK FOR THE BLIND IN THE MIDDLE EAST IN THE VOCATIONAL AREA

Dr. M. A. Nour, Director, Demonstration Center for Rehabilitation of the Blind, Cairo, Egypt

It is important to point out that the term "Middle East" as used in this paper signifies a different area from that generally understood by politicians or military experts. The fundamental starting point is the cultural concept of the term Middle East whose pattern emphasizes religion, Arabic language, tradition and manual rather than machine production.

In this part of the world we notice that the whole social structure is characterized by a strong emphasis on the solidarity of the kinship unit, extending beyond the conjugal family. The kinship unit of the countries of the Middle East has also been very closely integrated with the territorial community, which is one of the reasons why the blind, until very recently were, for the most part, supported by other members of the kinship unit. This ascriptive element as a part of the Middle Eastern culture has another influence upon the peoples of that area. Such societies generally tend to be individualistic rather than collectivistic, and hence there is a certain lack of concern on the part of the people with public welfare in their community. Thus there is great dependence upon the government to look after and take care of the various aspects of social welfare. Social work in countries like Egypt, Iraq, Lebanon and Syria is still highly centralized and largely dependent upon the respective governments.

Traditional acceptance of standards and arrangements is also one of the prevailing characteristics of that area, along with a strong vested interest in their stability. Consequently charity and social welfare generally follow the old methods which influence the blind and help to encourage a societal phenomenon like begging.

It is not the object of this paper to give a sociological account of the culture of the Middle East, but it is rather indispensable to this subject to give a brief picture of the society in which our blind live. If the statement which says that the blind are the last to die from hunger is ever true it is so in the countries dominated by Islam which exempted them from various social responsibilities

and encouraged their aid as a needy group. Moreover, it is still understood in our society that blindness is a disability. Even in recent legislation like the Egyptian Social Security Act, the blind were considered as completely handicapped. The law provides a pension for four categories:

1. Widows with children under 13; or to 17 years if attending approved schools or institutions; or if they are totally disabled; or of unknown parents.
2. Orphans of dead parents or fathers with remarried mothers or of unknown parents.
3. Totally disabled persons, including the blind, between 17 and 65 years.
4. Old age pension for those over 65 years of age.

On the other hand, the law recommended that measures should be taken to rehabilitate the disabled mentioned above including those who are totally blind. As a result of this law, several rehabilitation centers were established for vocational rehabilitation, among which is the Demonstration Center for the Rehabilitation of the Blind at Cairo.

As I have stated above, the governments of the Middle Eastern countries are charged with the majority of all kinds of social services including those of the blind. Hence any attempt to extend or establish a scheme in work for the blind should take this point into consideration. Moreover there is great need in this old and tradition-bound part of the world for constructing the soundest and most comprehensive state-wide program of services to the blind which is practicable. Such a program must be based upon the following elements:

1. The policy of work for the blind should tend toward preventive and at the same time rehabilitative services. It must be made very clear that the person who loses his vision is not in consequence a disabled person. If he is well adjusted and well trained he can become a useful member of his society and an earner of his living.
2. Such program or policy must be highly integrated, aimed at providing an overall program covering the various problems related to blindness.
3. Realizing these facts, attempts should be made to increase social awareness and to encourage voluntary activities in the field of the work for the blind. In some parts of the Middle East there are no voluntary services at all, while in other parts such services are very limited.

Such principles were highly regarded in the project under development now in Egypt as a Demonstration Center for the whole area of the Middle East. The activities of this center are designed to include:

1. Provision of general education and vocational training to blind children.
2. Provision of home teaching services.
3. Provision of Employment in the special workshop attached to the Center, or in home industries or in private firms.
4. Production and distribution of books in the unified Arabic Braille system.
5. Training of workers in the field of blind welfare to serve in Egypt as well as in other Middle Eastern countries.

The importance of having such a well integrated program does not lie only upon the fact that Middle Eastern States undertake most of the social services including blind welfare but also because of other factors such as:

1. The low standard of living of blind as well as of sighted citizens.
2. The high percentage of illiteracy among the blind in this area which no doubt exceeds that of their sighted fellow-men.
3. The interdependence of the various areas of the field of the work for the blind. Lack of personal adjustment or lack of adequate education, for example, is a great obstacle against the success of any sound program in the vocational area of the blind. It goes without saying that in order to have a relationship with the seeing based upon equality and mutual respect we must build a new generation of blind citizens and nothing but the adoption of overall programs that can help in this direction.

After this necessary exploration we can proceed to analyze the existing problems confronting work with the blind in the vocational field. Such problems may be classified in three main categories:

1. Problems related to training of blind persons for various types of employment.
2. Problems related to employment.
3. Problems related to marketing of articles produced by the blind.

Before dealing separately with each of the above mentioned problems, it is necessary to mention some important facts about the work for the blind in the Middle East.

1. As far as it is known to the writer, there is only one special act of legislation which has been already issued for the blind in the whole area of the Middle East.
2. With the exception of Egypt, there is no overall program which has already been applied.
3. Facilities for education or rehabilitation of the blind are very limited compared with the large number of blind citi-

zens in this area. Institutions for the blind are located only in a few countries like Egypt, Lebanon, Jordan and Iraq. Most of these institutions provide special education with less emphasis upon the right of the blind child to have the opportunity to learn the things taught in the public schools.

4. Begging and other similar insignificant occupations are very common among the blind in this part of the world.

It is not an easy task to secure sufficient training for our blind for several reasons:

1. Most of our blind are not socially well adjusted. This may be attributed to various causes, among which is the attitude of society toward the blind and their ability to work. Economic factors also contribute to put the blind in the status which they have at present. Lack of proper education plays an important part in shaping the role of the blind as members of society. In Western countries social adjustment is greatly helped by the schools for the blind which consider such adjustment as an essential aim of education.
2. Generally speaking, there is a great shortage of training agencies. Blind trainees must be trained in well organized, safe, and specialized factories or workshops. Most of our existing places that can be used as training centers are not safely designed to accept blind trainees. Moreover, lack of specialization in working procedures creates real problems in training and placement.
3. There is also great shortage in trained and specialized instructors to train blind people. Such problems will be easier to overcome in the future as the training and employment programs develop.
4. Lack of special legislation for the blind is one of the most serious problems. Such legislation is indispensable if we are to admit that a blind individual as a member of society has the right for free and equal social interaction. A blind person as a trainee or as an employee needs to move easily and freely to and from the place in which he is employed. Such movement can be greatly helped by legislative measures such as those providing facilities to travel through reduced fares. Moreover, there is great need for legislation regulating the period of training each blind person must undergo before determining his eligibility for the type of work he is going to undertake.
5. Educational opportunities are still very limited. Blind children cannot find enough schools from which they can obtain the same certificates available to the sighted. For this reason we find blind students who are eligible to join uni-

versities or higher institutions are very few. Moreover, those who are able through their own personal efforts and means to reach the university level do not get appropriate assistance such as enabling them to have readers, for example. It is worth mentioning here that the few blind persons who were able to have university education have all made great success in various fields such as teaching, law, journalism and literature.

It is needless to say that the field of employment with regard to the blind differs in the Middle East from that in America or Europe.

Even during the last war, the blind did not have favorable employment conditions, like the blind in the United States, for example. Thus, nothing similar to the Brooklyn newspaper advertisement for blind workers at the height of the war ever took place in the middle East. Our problems of employment are due to the following factors:

1. There are very few special workshops as compared to the large number of blind people in this area. The largest workshop in this area is the one which is run by the Egyptian Association for the Welfare of the Blind. The annual sales of the production of this workshop in the year 1950 amounted to £2099 (\$5,981). The number of blind workers in this workshop is about 100.

2. One of the greatest objectives in rehabilitation of the blind is the avoidance of segregation by placing them in open industries. Such objective cannot be easily achieved as a result of the following reasons:

- A. As in many other parts of the world, we find that social prejudice is considered as one of the greatest barriers facing the blind in their struggle to work in private firms. The public's general attitude is one of suspicion of the ability of the blind to compete successfully in the matter of every-day living. Such attitude can be described as a sort of "protective neglect." Unemployment among the sighted in addition to the abundance in manpower is not a favorable factor to reduce the prejudice of the public and particularly the employer.

- B. In addition to the fact that the number of factories in which the blind workers can be placed is relatively very small, there is another factor which does not encourage the placing of blind persons. This is the lack of placement specialists to work with prospective employers and having as their responsibility the finding of suitable jobs for the blind and later on follow-up

after placement. Trained specialists are badly needed to avoid "improper placement," which is very dangerous to any placement progress because one failure may close the door for a long time. With the increasing trend toward industrialization in the countries of the Middle East, placement in open industries may become in the future one of the most important areas of employment of the blind.

- C. Social norms and traditions also have their effect in determining the size of the labor market of the blind. Such traditions are deeply rooted in the whole East where the blind are looked upon as the most eligible category in the community for help in the form of alms. Although such norms are gradually changing and breaking down, yet they are still regarded as unfavorable conditions that hinder the suitable employment of the blind.
 - D. There is great need for legislation to encourage employers to hire blind persons as workers. Such legislation is completely missing nowadays but it is hoped that it will be established in the near future.
3. Among recent trends in the field of vocational rehabilitation is that toward the development of industrial homework programs. In an area like the Middle East where special workshops are scarce and opportunities of employment in open industries are limited, such homework programs appear to present good opportunities for the blind. Yet there are certain problems that confront the work in this area such as lack of marketing, inadequacy of homes and the need to exercise more efforts than a blind person can bear in order to gain a reasonable profit.

Marketing of blind-made products constitutes the most important problem which confronts the special workshops. Distribution of blind-made articles is not an easy task for the following reasons:

1. Blind-made articles face strong competition from similar articles, whether such articles are locally made or imported from other countries. Prisons, delinquency reformatories and other social agencies produce many of the articles which our blind produce. Moreover, sighted workshops and sighted workers cause more competition than their counterparts in other western countries. This is partly due to the nature of the economy and the methods of production in most of the Middle Eastern countries where we find an excess of manpower.
2. Lack of propaganda constitutes another problem. Blind-

made articles are not well known to both consumers and sellers. Salability of such articles depends to a large extent upon the conviction of the public that the blind can produce articles comparable to those produced by the sighted.

3. Preferential marketing arrangements are missing. Thus the special workshops for the blind must compete with other modern factories to get some government contracts. Legislation is also needed here in the form of a preferential purchase act or exemption of blind-made products from taxes.

There is no doubt that some sort of work for the blind in the vocational area has already started in many of the countries of the Middle East. Some of the Governments of these countries have begun to realize their responsibility as with regard to the blind. What we hope for is more efforts in this direction. Efforts that coincide with recent developments in the field of the work for the blind. In the meantime, it is hoped that the efforts of the states in this area will be coupled with the efforts of the people themselves, as a result of the gradual increase in social awareness and the diffusion of new ideas and techniques. Co-operation among the nations of the world seems to be indispensable to achieve this goal which will enable blind people to become employed citizens, socially efficient and having successful careers or vocations. It goes without saying that we all have come to this World Assembly seeking such objectives.

PARTICULAR PROBLEMS THAT CONFRONT WORK FOR THE BLIND IN THE FAR EAST IN THE VOCATIONAL AREA

**Kingsley C. Dassanaiké, Principal, School for the Blind,
Mt. Lavinia, Ceylon**

I am here as the representative of the blind in Ceylon and the representative of the Government of my country. As such I bring you greetings from the Government of Ceylon and the blind of my country.

It is indeed a very great privilege to speak to you on this occasion and I am sincerely thankful to the Programme Committee of this Conference for the great honour they have paid me in calling upon me to speak on "The particular problems that confront the work of the Blind in the Far East—in the Vocational Area."

What Sir Clutha Mackenzie and Capt. Desai said last night has greatly reduced my responsibility and provides the background to what I shall say presently. Those of us who have come here from the East and from Africa will have already realised what great progress has been made in the vocational area in the Western countries as compared to what we have been able to achieve in the East in the same area.

There apparently are certain problems in the West, but ours are quite different. Our problems in the East are conditioned mainly by the manners and customs of our peoples and by the economic conditions of our countries. It is good to state here that as far as we know the countries in the Far East which have any welfare for the blind are Japan, China (including Formosa and Hong Kong), Thailand, Malaya, Indonesia, Burma, India, Pakistan and Ceylon. Of these countries Japan has made great progress. The present satisfactory condition in Japan has been due to the fact that its welfare work has been built up over a period of more than a hundred years. Today there are 79 schools there giving education and training in industrial pursuits and for professions. The Public Employment Exchange and other agencies for the welfare of the blind find employment for those trained, and we have it from the report of no less a person than our mutual good friend, Mr. Eric Boulter, who has recently returned from Japan, that 72% of the trained blind in that country are gainfully employed in agriculture, acupuncture, moxibustion, massage, music, industry or on home-work. The problem in Japan chiefly is the 28% trained blind who become unemployable owing to, I quote Mr. Eric Boulter again, accident or disease, not being financially well qualified, or not having family support even after their education and training.

Apart from Japan the particular problems that confront the blind in the Far East in the vocational area broadly fall into three categories:

1. Problems due to the attitude of society to the blind
2. Problems due to economic difficulties, and
3. Problems due to the blind themselves.

To take the problems that fall under the first category. In all the countries in the East we work to train the blind to fit themselves into a normal society, but unfortunately the attitude of society to blind people in these countries is very remote from this idea. Begging is not only tolerated but also encouraged, because the blind are looked upon as objects for charity, and the giving of charity is important to attain merit for one's self. This helps the blind to become a self-pitying community. When a blind person gets used to begging he cannot give it up. He finds a source of easy money and he is independent and happy in the companionship of the street. Thus many blind in those countries drift to begging even before their training is over. Some blind people ashamed to take the begging bowl would still obtain charity from their friends.

Again blindness is looked upon in these countries as a curse or punishment from God, even if the cause of blindness was a pure accident. Thus, society feels there is no need to revolt against God.

There is also the superstition that to see a blind man the first thing in the morning is a sure indication that everything one undertakes that day will be a failure.

There are others who are really sympathetic but who cannot bear the sight of the blind working among them. They prefer to help the blind without helping them to work. Fortunately the educated groups do not all look upon the blind in this manner, yet they often still cling to certain superstitions and beliefs. So, while society would not mind and would even welcome the education of the blind in schools and industrial institutions, a large portion of society find it difficult to bear individual blind people working and moving in normal surroundings—placed in particular jobs.

Then again I have known instances in my own country where definite obstruction was made for the continuance in employment of blind people in certain work where the sighted workers feared their replacement by the employment of the blind on a lower wage. Further, there is a section of society which extends the wrong type of sympathy to the blind—overlooking their faults by covering their mistakes, tolerating bad conduct, and not having the courage to correct them when wrong. All these are obstacles to the successful employment of the blind.

This attitude to the blind can be overcome only by the education of society through the press and the radio and from the platform, and by the very success of the blind in normal society. Many years of patient endeavour alone can bring a happy change.

To turn to problems due to economic difficulties. It must be borne in mind that most of these countries have had long wars, or are underdeveloped, or have been long dependent on foreign powers. For one or other of these reasons the majority of these countries are in economic straits. As such, proper programs for education and social services in these countries have been long impossible. Today with Colombo Plan aid and with the help of various other international organizations things are moving fast in some of these countries. Taking first things first, it will be some time yet before all these countries can educate and train every child according to his needs and talents. In almost all these countries, as Sir Clutha said last night, it is the endeavour of foreign missionaries that has started the education and training of the blind, and I believe that in all these countries it is still the voluntary bodies set up by missionaries that continue the good work with or without State aid. India, however, has some State institutions and Indonesia, too. In many countries the State aid is quite small. Malaya has become well organized through local effort. Indonesia too is happily bent that way. In India and Ceylon we have a splendid partnership between the State and a generous

public but, due to present economic crisis, especially in Ceylon, these efforts have now become inadequate.

Thus these economic difficulties have brought about certain problems. There is a great paucity of facilities for vocational training in particular vocations. There are no funds to obtain them or support them adequately or to purchase the necessary equipment. Funds are not sufficient to pay local instructors satisfactorily. Vocational training in many places has become little more than training for cottage industries as fitting oneself to work in the school workshop. Many sighted people are without employment. How then can openings be found for the blind?

Where facilities are available for vocational training placement is difficult, because in the East the impression that the blind cannot do good work still exists. Another reason is that the employer is afraid that he will lose money by employing a handicapped person. There are men who are genuinely interested and would like to employ the blind in certain trades, but they feel cannot expect the same quantity of work from a blind person as from the sighted and therefore are not willing to take the risk. Thus it is necessary that both employer and employee must be protected with the help of a state subsidy. This may only come through legislation.

Then again in all these countries except in Japan, there does not seem to be any security of employment. All the good work that schools and training institutions do can be nullified if there is no hope for permanent employment after such education and training. In some countries this can be overcome only by legislation. In other countries the state can set an example without resorting to legislation.

There are no agencies or placement officers in most of our countries to discover avenues of employment for the trained blind and for placing them. Japan is, however, excellently served in this direction. Malaya, under the direction of the welfare officer, has begun to make headway. Ceylon within her small sphere has, through welfare officers, made fair progress in placing the trained blind.

It is worth mentioning a recent venture in Ceylon. Work has been found for some blind people at the pithead of a graphite mine. The developed sense of touch and hearing of the blind is being used to sort out graphite lumps from stones. A very sympathetic employer has made every facility available for 18 blind people working there. Other employers who know of this experiment secretly wish it to fail because they fear legislation compelling them also to employ a certain percentage of the blind. Another opening has been found in a factory for making boxes for the packing of men's vests.

Many blind people in some of our countries find it difficult to travel to their work owing to the absence of travel concessions. Some are handicapped owing to the fact that the equipment they need is not exempt from customs duties. This is again a problem resultant on the economic condition of the country.

To come to our third category of problems. I must mention that some of the things I say in this connection may seem unkind—but coming from one who has worked with the blind and for the blind for many years, you will pardon me if I say that what I shall mention is the result of my study and experience both within and outside my own country.

Someone, I think it was Mr. Wilson of the British Empire Society for the Blind, said in his report on Blindness in the Middle East and African Colonies, that the greatest handicap the blind person has is his own and his neighbour's attitude to his blindness. This is intensely true in regard to our countries as well.

I said earlier that the attitude of society to the blind has caused the blind in our countries to become a self-pitying community. This is indeed the fault of society, but by becoming a self-pitying community the blind have made conditions more difficult for themselves. Yes, the blind seem to take things for granted. They want assistance to come to them. They feel it is their right to expect and to receive assistance without much effort on their part. Even the best educated and trained amongst them expect special treatment because they are blind. They expect minor defects and deficiencies in their work to be overlooked, resent criticism of them and expect equal or higher wages for the work than is paid to a sighted worker.

Many blind people in our lands have become used to receiving sympathy and expect to be excused when they are not punctual at their work. They even forget courtesy and good manners and respect to authority. Employers tolerate these conditions for a long time because they give work to the blind in order to be of service and genuinely wish them to succeed in the work, but there comes a time when action has finally to be taken and the blind man loses his job. Then he blames it on his blindness and not on his conduct. I have known this to happen in my country in the case of well educated blind people.

Again the blind who have become used to the comfort of an institution where every facility is provided and where individual talent is catered for, or who have been used to great kindness and ease at home, naturally find a different situation on taking on a job. They find conditions of work difficult—long hours of work, living away from home, scrap meals, lack of recreation, the inability to earn a big wage at the beginning, and they soon give up their work. For some time such a person tries to secure another

job, or at least pretends to be trying to get one, but finally returns to institutional life as a worker in the sheltered workshop with hostel attached.

Then again some blind people are over-confident and are not prepared to accept their limitations. They try to get appointments to which they think they are qualified, not realizing that experience, personality, training, education, knowledge of the work, physical fitness, etc., are all required, and when they do not get the job they say they did not get it because of their blindness, and even criticise the would-have-been employer. Thus those blind unconsciously build a wall of opposition around themselves. This is another problem which the blind in vocational areas have to contend with.

Some blind folk are very unambitious and are content to live a passive life dependent on charity. This brings me to an important point. The best encouragement for the blind to seek independent employment is the example of successful blind people. Their daily example will be an inducement to the younger blind in seeking vocational training.

I have just placed before you the problems of the blind in the vocational area under the three categories I outlined at the beginning of this paper—namely the problems due to the attitude of society to the blind, the problems due to economic difficulties, and lastly the problems due to the blind themselves. I now wish to deal with one or two problems facing special vocations.

The first of these is telephone switchboard operating. As a vocation this ought to have wide possibilities in our Far Eastern countries. Unfortunately, however, owing to the fact that the governments of some of these countries are now changing their switchboards to those operated by light, blind people may be barred from this vocation. This is an important matter which this assembly should really consider. We must respectfully request the Governments of the countries concerned to provide opportunities for the blind to be employed as telephone switchboard operators. Some employers are willing to take blind people as telephone operators but cannot go to the extent of buying a special switchboard. Similarly in Japan success in a special examination is now required to practice acupuncture, moxibustion and massage. This practice in itself is not wrong. The fulfillment of such a requirement is an added qualification for the blind. The real problem is that a large number who intended to do acupuncture, moxibustion and massage will now be left to find other avenues of employment.

As regards shorthand-typists, those seeking employment must procure their shorthand machines. This also constitutes a problem.

Mr. Chairman and friends, I must dare say that the subject before us—"Particular problems that confront the work of the Blind—in the Vocational Area" is a very wide one and is a difficult one, especially when it covers so many countries so far away from one another and so diverse in their ways of life. Yet I hope I have been successful in putting before you some of the problems which confront workers for the blind in the Far East. To some of these problems we have found the answers. We count on this conference to take up the other problems and suggest ways and means of overcoming them. The problems require urgent solution. The task is heavy and its magnitude can only be realised when we say that there are at least 4,500,000 blind people in these countries. So we come to this assembly to learn from you, to be guided by your advice and to be inspired by your achievements.

SOME ASPECTS OF TRAINING AND EMPLOYMENT IN SHELTERED WORKSHOPS AND HOME WORKERS' SCHEMES

S. W. Starling, M.B.E., Secretary and General Manager,
Association for the General Welfare of the Blind, London, England

My object is not to dwell on the need for sheltered employment for the blind, but to deal with some of the problems which confront us in the administration of these establishments, and in the training of the blind persons who need that service. Our aim at all times is to seek out the square peg for the square hole, and we know how difficult this is, not so much because of the handicap of blindness, but because of the contrary and seemingly almost irreconcilable elements we meet in human nature, which to some extent we find within ourselves. These, however, excite our sympathy, and urge us to find a solution within the limited scope of our various undertakings.

There is no hard and fast rule to guide us when we are dealing with the blind. Each person presents his own problem according to the circumstances, and that is perhaps what makes our work not only difficult but interesting. We are constantly dealing with human problems, and what can be more satisfying than to be able to solve or at least partly solve them.

We differ in our approach to the employment question from the ordinary manufacturer. He, in the first place, decides what products he will make, and then proceeds to recruit his labour. We, however, start with the human element, which is our first consideration, and from which we move on to choose the kind of work most suitable.

I speak now of what is done in the workshops with which I am familiar and which are influenced by a policy under which blind people are admitted for training and later for employment. These workshops require from all who are admitted a sustained endeavor commensurate with that of ordinary industrial effort.

To attain this standard we require every person to undergo an approved course of training. Such a policy helps to some extent in overcoming difficulties which would undoubtedly arise where business considerations are subordinated to charitable practise, and where employment is provided for the blind regardless of their capacity. On the one hand industrial methods prevail, as against a system over which there can be little or no control. As to which of these two schools of thought you subscribe will depend upon your outlook and your attitude to the many problems with which from time to time we are faced.

My plea is that the proper function of a sheltered workshop is to give efficient blind workers the opportunity of an economic and independent life, in contrast to the provision of employment for the blind without due regard to their efficiency. Furthermore, I contend that candidates for training should be carefully chosen, and the fullest opportunity given to those who are trainable. Those who are not suitable should not be admitted or, if after admission any trainees should subsequently prove unsatisfactory, their training should cease. Inefficient workers produce low grade work which must in the long run prejudice the sale of blind-made goods generally. Our Chairman has asked me to refer particularly to the cases of blind basket and brush makers, whose income is insufficient. This request brings me to the question of output and remuneration.

Now if adequate training has been given, is it not reasonable to suppose that the student will have attained a standard of efficiency in both quantity and quality of work produced? Conflicting views are held by workers for the blind on the standard of efficiency to be attained, and herein lies the crux we have to resolve. It should, however, be no difficult puzzle. By what measuring rod can we assess the quantity of work a blind man should produce? What guide have we to determine the number of laundry baskets, for instance, he should make?

Years ago an understanding was reached with an organization of blind people that in the field of handicrafts their output should be one-third of that of a normal worker. If, therefore, the average seeing basket maker can produce ten laundry baskets per week, on the agreement of the blind themselves we can expect the average blind worker to produce $3\frac{1}{3}$ of these baskets.

This same reasoning can be applied to other industries in which the blind are engaged, and certainly provides a simple guide by which to determine the potential of the average blind worker. But many, one will contend, are not average; they are subnormal and are, therefore, incapable of producing the amount of work our measuring rod determines. Is this incapacity real? If so, there must be a limit to which the output should fall.

Steps are now being taken in my own country to prevent the admission to sheltered industry of persons whose earning capacity is below a certain level, it being contended that apart from the cost to the community this involves by the heavy supplementation of earnings, the workshops or home industries for the blind are not the proper branches of blind welfare to which these persons should belong. To put workshops and home industries on a right footing, a qualification for admission should be determined. Having done this we can proceed to discuss in fuller detail the method by which the blind worker should be remunerated.

In Great Britain the work done by the blind is paid for on a piece-rate basis, which is in accord with the practise of the trades in which we are engaged. Trades Union of Trade Board rates of pay govern the majority of our trades. We therefore pay the recognized rate for a particular piece of work done, and in following this practise we are able to keep the accounts of our trading department quite separate from those relating purely to charity. If on our previous computation of output the average seeing basket maker earns, say, £9 a week, the blind man will earn £3 a week. This, however, cannot be regarded as a "living wage," and something must be added to reach that standard, but what is added should not be recorded as wages, but as an augmentation of wages.

To provide this extra sum would be an easy matter if organizations of the blind had sufficient funds to meet it, but alas, many are not so fortunately placed, however rich their endowments.

In Great Britain the difficulty is overcome by financial assistance from the local authorities who contribute an agreed figure to the employing agencies to enable them to provide the extra sum for augmentation to which I have referred. They in turn receive a contribution from the National Exchequer, which is approximately one-half of what they pay to the employing agency. The amount to be paid by the local authority is determined on an agreed minimum rate of remuneration to be paid to all blind workshop employees. This figure is related to the wages paid to Municipal workers of a certain grade (who of course can see). For blind persons working in their own homes a flat rate of augmentation is paid, as compared with the variable rate paid in respect of workshop employees. Thus you see how the low wage earner is treated, and so long as he can earn the minimum figure required to qualify for either workshop or home employment, he is assured a reasonable weekly income.

Although we do not set out to be profit-making concerns, we do try to conduct our affairs as economically as possible. Our overhead expenses will always be higher comparatively than those of our competitors employing a similar number of workers and en-

gaged in a like business because, generally speaking, we want three men and three places to produce what an ordinary workshop would produce with one man. Hence, rent, rates, insurance, lighting, heating, etc., must cost more. In addition, we need more supervision, which again is an added expense. With the exception of a few special items, it is obvious we cannot recover these expenses in our sales, and we must face up to that fact. We can, however, prevent waste, and by keeping production and sales as high as possible we can reduce the margin between selling prices and total cost.

We should always know the prime cost of an article, i.e., the direct wages and the value of the materials used. Assuming that we buy our materials in the right market and that we pay the recognized trade rate for the work done, the prime costs should be the same as that of our competitors, and as we are compelled to sell at the market price, which is the price charged by our competitors and is, generally speaking, higher than prime cost, we should know what contribution we get towards our overhead expenses. It is not a case of employing the best business methods we can, having regard to the special nature of the workshops in which we are engaged? If we keep the financial accounts of our trading activities from those of a purely welfare nature, we are much more likely to be businesslike, and thus produce better financial results.

Some years ago a board of industrial experts were called in to advise the workshops for the blind in Great Britain on any improved methods they as outside specialists could recommend, in order to bring workshops for the blind into line with modern developments. After carrying out a fairly extensive survey into what was going on, we were advised to develop the existing trades, which for so many years had proved to be suitable for the blind. On the other hand they recommended that machinery should be introduced wherever possible, and here special reference was made to the pre-built border for spring interior mattresses, and the tape-edging machine. These are now in use in some of our workshops, as well as the power-driven sewing machine which is operated by blind women. Power units for flat machine knitting have also been introduced. This enables a blind girl to operate at least two machines. The semi-automatic boring and filling brush machine too has been installed in some of our workshops, on which, operated by a partially blind man, brushes can be made to meet the requirements of government departments at a competitive cost.

Living as we do in a mechanical age, we should wherever possible make use of machinery, but only if it will enable us to sell our goods more readily, and will assist in the employment of the blind. On the subject of mechanization it would be imprudent to generalize.

Your chairman has also asked me to talk about marketing. I suppose there are few workshop managers who do not have difficulty in selling all the goods of their workshops. Where this arises it must cause deep concern for two reasons: a) the accumulation of stock which may have to be sold at sacrificial prices, and b) lack of full employment.

It has been said with a great degree of truth that employment to a blind person is as valuable in a spiritual sense as the money he earns is in a material sense. We shall be lacking in our duty to the blind, therefore, if we do not use every endeavor to give them full employment.

During the last twenty years much has been said and indeed written, on how our marketing problems should be tackled. Some feel that the problem can best be solved from a national point of view; others by dealing with it regionally; whilst there are still many who prefer a local arrangement. We in Great Britain were rather fortunate during the war in having a national organization which dealt specifically with sheltered employment matters, namely, the National Association of Workshops for the Blind, Incorporated, and an arrangement was made for invitations to tender for Government requirements to be dealt with by that body. This resulted in many useful contracts being obtained and the blind thus able to play a very important part in the national production during that period. That experience proved that government contracts could be dealt with nationally, and the practise has continued since the war. Unfortunately, the demand of the government for the goods made by the blind has fallen considerably, aggravated by the fact that there are more competitors in the field in peace time.

Although our plea to the government for preferential marketing arrangements is in accord with the resolution adopted at the Oxford Conference, that preference does not go beyond an invitation to tender. If the price quoted is the lowest submitted we get an order; if not, we are requested to revise our price to conform to the lowest tender. This also applies to the arrangements we have with local authorities who, however, on the whole are anxious to place as much work as possible with workshops for the blind. As a result of the policy to which I have referred we have to forego many orders, because the prices offered are far too low. In this connection, workshop managers have to decide amongst themselves the lowest price they are prepared to accept. Our sales to government departments of less than two percent of total sales, and to local authorities of about twelve percent, are but a small contribution to the general problem of providing our blind people with full employment. We therefore have to rely on other markets which are as wide and varied as possible.

Some institutions with an enterprising sales staff are fairly successful, and do not have to worry too much about the employment problem. They can usually keep their workers fully employed by the orders the sales staff are able to obtain. In the case however of the small workshop where the manager is expected to be the head cook and bottle-washer, he cannot devote so much time to selling and therefore may find that orders do not keep pace with production. For such workshops a regional marketing scheme might be the solution, but this can never be successful unless there is the fullest co-operation of the participants. Such matters as price fixing and an equitable distribution of orders have to be very carefully decided, and on which there must be complete unanimity.

We are often told we do not advertise sufficiently. One suggestion I put forward for your consideration is the adoption of a national poster (such as the one I have displayed), and on which can be overprinted the title and address of the local workshop. They can be produced in various sizes, and help to create a demand for all the products of the blind, wherever they are made, thus giving each workshop an opportunity for selling blind-made goods produced in other workshops. Again, a national catalogue for illustrating all the products of the different workshops or home industries' schemes is a useful form of advertising. The retail shop undoubtedly is an excellent means of selling your goods, but it must be situated in a good shopping centre. What better advertisement if the goods are well displayed? I am perhaps fortunate in having a very attractive shop situated in a busy shopping area, which is responsible for over 20 percent of my sales. The bus is often held up in front of my premises and passengers cannot help but see the goods we have to offer, and while they cannot stop there and then to make their purchases, they write from towns miles from London for goods they have seen displayed in our shop windows. Many customers are obtained in this way. It must be emphasized that the goods displayed are up to standard.

As I said earlier, bad workmanship prejudices the sale of goods made by the blind; so is it equally true that well-made goods are your best advertisement, for who would not buy what is made by the blind, in preference to what is made by a sighted craftsman, everything else being equal? By that I mean quality and price. I have, as you no doubt have too, seen articles made in a workshop for the blind of a very low grade. The fault does not always lie with the blind worker, but rather with the supervisor, who excuses bad workmanship on the grounds of blindness. Our job is to stamp out this attitude of mind and to encourage all who are responsible to aim at the highest level. Our supervisors are employed to check faults and, provided adequate supervision is

given to a properly trained blind man, there is no excuse for bad workmanship. It is no good for a manager to complain about lack of sales if what he offers to the public is not up to standard.

Some workshop managers support a policy of selling with their own blind-made goods those made by seeing workers, but there may be others who query the justification of this practise. The answer is that it helps in the sale of blind-made goods. There are some buyers who prefer to get all their requirements from one supplier, and happy is he who can satisfy the buyer in this respect, but to do so he must augment his own manufactures with goods made elsewhere. I speak from my own experience, and I know the extra business obtained in this way and its advantage to our blind workers. Then again, if you have a retail shop a combination of blind- and sighted-made goods produces more business. By displaying useful sighted-made goods in your shop windows you attract buyers which gives your salesmen the opportunity they welcome of showing these customers what the blind make. How often have we heard a customer say, "I didn't know you made this or that"?

But there is also the advantage of profit in the policy we are discussing. Of the total gross profit made by my own workshops annually, 30 percent is due to the sale of goods bought from elsewhere. This is a very useful contribution, and helps us to meet the loss we make on the blind-made goods we sell.

One thing we should always remember is that while a seeing man may make the best of inferior material, the blind man is further handicapped by it. Another sales deterrent is bad delivery, a point I fear I must mention, because much good business has been lost through keeping a customer waiting too long for his goods.

A contributing factor in marketing is to employ good travelers (salesmen), whose ground should be clearly defined, especially when two or more are employed. It is a bad policy to engage a second-rate man, and whoever is engaged should know his business. He should be given the opportunity of spending sufficient time in the workshop to become familiar with the products of the blind. It is a good plan sometimes for the production manager to accompany the traveler when technical points are at stake. We are apt, at times, to under-estimate the part of a good traveler plays in providing work for the factory, and every consideration should be given to this aspect of the case.

Finally, are we prepared to make what the customer wants, rather than expect him to take what we have to offer? Find out what special requirements local industries need and do your best to meet them. Much good business is obtained in this way.

MERCHANDISING AND INDUSTRIAL OCCUPATIONS

Joseph F. Clunk, First Vice-President, American Association of Workers for the Blind, Philadelphia, Pennsylvania, United States

In considering employment in competitive occupations in the merchandising and industrial employment fields there are basic principles that must be observed in both of these activities:

1. Blind persons should not be expected to perform all the duties in any occupation any more than a sighted person is required to perform all the duties.
2. Blind persons do not work alone any more than sighted persons work alone.
3. 95% of the blind persons in our country become blind after the age of twenty-one and only 25% of the blind group are employable at any kind of a job but only 10% have ability to work in competitive occupations.
4. We must analyze the functions in every industry or business and separate those which require sight from those which do not require sight.
5. We must place blind persons in the business or industry that would be normal for that person if sighted and assign duties to that person which do not require sight and arrange for sighted associates to perform the duties which do require sight.
6. We must not approach this problem with the question: What can a blind person do? but rather: Are there enough duties in the business or industry which do not require sight to make a full-time job for the blind person who would ordinarily be in that business or occupation.
7. We must provide enough continuous management or supervision to the blind person to insure the continuing success of the business and the relationship with the industrial employer. If the individual blind person becomes inadequate for any reason, we must replace that person with a qualified blind person before either the public or the employer becomes discouraged with the participation of blind persons in the activity.

In the employment of blind persons in open industry there are certain basic principles which we must remember:

1. We must select only the processes for which sight is not required although we may place some persons with a little sight on jobs where movement is required around the factory or where color must be identified.
2. Every industry making a finished article has a large number of processes which can be performed without sight. These processes require only manual dexterity, co-

ordination, and automatic judgment and the sighted workers do not use their eyes in their work.

3. We must not permit a blind person to continue in employment in an industrial company unless that person produces as much quantity and quality of work as the sighted persons in the same department. We must not permit a mixture of charity and business in the production departments.
4. Blind persons placed in industry must be selected from those persons who would be working in industry if they were sighted. Failures result when we place clerks as operators of machines or in the assembly of intricate equipment.
5. The agency for the blind can arrange for apprenticeship training of a blind person with the owner of the sighted industry in which the blind person will be employed after training, and this training should be in the type of work in which the person will be engaged.
6. A blind person can learn as many different kinds of industrial work as that person would be able to learn if sighted, although he may not do the same identical work as if sighted. For example, a sighted person may be a welder and may also have skill in operating a drill press and a punch press. After blindness he may not be a welder but he can learn other industrial processes to take the place of welding and he can also operate drill presses, milling machines, punch presses, saws for the cutting of wood, sewing machines and do many other industrial operations.
7. Modern production methods require specialization for the employee and a minimum of thought. The average sighted worker is expected to learn a specialized production process in three days to a month and the same sighted worker can learn the processes that are within his skill just as quickly after blindness as he learned them before. In the United States and Canada we find it unnecessary to provide years of training to a blind industrial worker who is placed on a job in which he can learn that particular process in a few days or a few weeks.
8. The development of production equipment and automatic or semi-automatic machines creates jobs for blind persons because it removes the necessity for sight and frequently even for judgment for the sighted employees, and thus jobs for the blind are being created by modern engineering.

Some examples of employment in different industries are the following:

Laundries—the operation of ironing machines, extractors or dryers, washing machines, folding and packaging.

Metal trades—the operation of lathes, punch presses, drilling machines, threading machines, milling machines, assembly of all kinds, electrical spot welding, inspection, sorting, counting pieces by weight, and packing.

Candy industry—molding or forming candy pieces, wrapping and packaging, operating machines for putting on chocolate and other kinds of coating material.

Paper box industry—cutting paper stock, scoring, operating machines in the forming of boxes.

Abattoirs—stuffing sausage and weiners and linking these items, wrapping meats such as ham and bacon, operating canning machines and packing in cartons.

General food industry—packing pickles, onions, beets, mustard, vinegar, and similar foods in jars, operating canning machines and packing in cartons.

Bakeries—forming loaves of bread, greasing pans, feeding ovens and delivery from ovens, cutting cookies, packaging baked goods.

The best salesman for blind labor is a blind person who personifies the abilities of the blind individuals he is trying to place. This blind placement agent must be able to call upon the employer with ordinary assistance from the general public. He must be able to discuss the subject with the president of the company and with all the officials down to the foreman and do it in the language of the person he is interviewing. He must be able to analyze the processes that are involved in the making of the product of the industry and to select the departments in which practical processes are to be found. He must be able to learn these processes quickly and to demonstrate them efficiently even though he has no previous experience in the industry. He must be able to judge the type of sighted persons employed in the department and to select blind workers who match the temperament, personality and other characteristics of the sighted workers and who have the skill necessary to perform the duties of the job. He must make unpleasant decisions when they are necessary and apply continuous supervision to the relationship between the blind employee and the employer.

Experience has proven that a good industrial placement agent can place from twenty to thirty persons per year in open industry, can build up to one hundred jobs in from fifty to seventy-five industrial companies, and keep them filled with competent blind persons. From twenty percent to thirty percent of the employed group will change each year. This is a full-time job.

We find that we require at least one good placement agent in a population area of one million people, and that out of this number the placement agent will find employment for one hundred blind

persons. The possibilities of industrial employment are limited only by the energies of the placement officer, the support given to that officer by the agency for the blind and also by the amount of education we provide to the sighted employer in eliminating fear and lack of confidence. There are more jobs in open industry which do not require sight than there are qualified blind persons to be employed.

In North America the term "vending stand" is frequently used to mean a merchandising business in an office building or factory.

Ever since human beings developed money and began using it to buy services and articles from each other instead of trading horses for cows or sheep and camels for wives, a merchandising system has held possibilities of employment for blind persons. The management of a store, either large or small, the management or detailed work involved in a sales organization, the management and operation of service business — all provide opportunity for qualified blind persons who would be in some form of merchandising if they were sighted.

The training of a blind person as the manager of a vending stand or merchandising business is the same as that given to a sighted person insofar as basic business methods are concerned. In addition to this a blind person must be taught the methods of identifying each item of merchandise and a pattern for the display or arrangement of the stock. Every blind person requires the continuous assistance of sighted persons who are either officially or unofficially supervisors or trainers and who assist the blind person to avoid bad habits or in the correction of unsatisfactory personal or business methods. The preliminary training in a small retail vending stand business may require from four to twelve weeks, but the person actually requires continuous training throughout his entire career in this activity.

We believe that less than 10% of our sighted population attempts to engage in merchandising and we find that 95% of the sighted fail in their own business although they may have been satisfactory employees of large merchandising organizations.

The difference in their careers is due to the fact that these persons cannot discipline themselves and control either their time or the funds of the business. Thus they prove that most persons must work under regulations which require them to meet practical standards of personal behaviour and of financing every day in the week. When they accept these controls from the managers of large corporations they prove to be good employees and successful merchandisers. When these sighted persons failed

in their own business they did not affect the possibility of employment for other sighted persons and the general public pays little attention to their failures. When a blind person is established in merchandising and fails for the same reasons as he would fail if sighted, then all blind persons are condemned and business opportunity is denied to other blind persons in the area. The failure is always charged to blindness and not to the normal causes.

Recognizing this fundamental fact, the progressive agencies for the blind in North America began adopting the principles and methods of the large corporations or chain stores and applying these principles to merchandising programs in which blind persons are employed rather than establishing blind persons in their own business. The first agency to recognize and accept these principles was the Canadian National Institute for the Blind and after ten years of successful experience in Canada the same methods were adopted by the agencies for the blind in the United States. Today more than thirty states are using the chain store principles in the administration of merchandising programs.

In this system the blind person is employed as a manager of each local business but the business is owned by the agency for the blind, and this agency provides supervision, bookkeeping and all other management services that would be provided by a large, successful merchandising corporation. The individual blind person does not own any part of the business. Usually the agency for the blind pays the blind person a wage or salary and a bonus or commission. When the blind person refuses or fails to observe the rules of good business the agency for the blind replaces that blind person with another blind manager, and thus preserves the merchandising business as an employment opportunity for one blind person after another. There are businesses in Canada that have been operated by the Institute for the Blind since 1928 and they have had fifteen or twenty different blind persons employed as managers in them but regardless of the ability of any one manager the business is preserved and continues to serve as an employment facility. When a blind person proves to be a competent manager in a small business that person is promoted to a larger business with larger salary, and correspondingly when a blind person is placed in a business that is too large for his ability he is transferred to a smaller business that is more compatible with his skill.

What kind of merchandising is most suitable?

We do not have a complete answer to this question even though we have been engaged in establishing blind persons in

merchandising for at least fifty years. Most of the agencies for the blind in the United States think of the merchandising business for the blind as one in which such articles are sold as newspapers, magazines, tobacco, candy, milk, sandwiches, non-alcoholic beverages, and similar items. These refreshment or vending stands are located in office buildings, hospitals, at street intersections, along the highways and in neighborhood shopping centers. The Canadian National Institute for the Blind was the first and is still the largest owner of lunch services in factories where the service provides full meals for the employees of the industry. In North America we have far too much concentration in serving of food and related items but this is due to the comparatively low cost of establishing this type of business. When the chain store management method is used by the agency for the blind it is possible to provide employment for 20% of the employable blind persons in the area served by the agency for the blind, and the agency can secure enough funds from the business enterprise to pay its cost for supervision, bookkeeping, repairs and insurance. We find that blindness does not change the ability of the person to manage a business of the type in which he would be employed if he were sighted and in which he would be successful.

In every part of the country we find blind persons who own and manage such merchandising businesses as hardware stores, electrical appliance and service stores, souvenir shops, drug stores, clothing and dry goods, commercial restaurants, bowling alleys, hotels, office supply business, coal and oil business, insurance, investment brokerage, manufacturing of many types including large candy companies, machinery manufacturing, printing and in fact almost any kind of merchandising of goods and services required by the human race. This group constitutes about one twenty-fifth of the employable persons in their areas.

There are several important elements which must be observed:

1. If the blind person owns and operates his own business then he must have more knowledge of that business than if he were sighted.
2. He must not conduct his business in such a manner as to require tolerance from the customers because of his blindness.
3. He must have all the elements for success that are required of sighted people in the same business.
4. He must have competent, honest, sighted employees and associates.

If the blind person is one that cannot discipline himself and

would be employed by others if he were sighted, this person must then be employed as a manager for a merchandising business owned and operated by the agency for the blind, and in this case the following elements are necessary:

1. The agency must provide attractive, well-designed equipment that has personality and that will reduce the adverse emotional reaction to the blindness of the manager.
2. The agency must provide adequate stocks of merchandise.
3. The agency for the blind must employ competent sighted supervisors who can give continuous training and supervision to each business assigned to their care.
4. The agency for the blind must make contracts with the owners of office buildings, hospitals, factories and other properties by which the agency assumes full responsibility for the management of the business at all times and during the entire life of the contract.

When the agency for the blind establishes merchandising businesses in this manner it can provide employment opportunities for 5% of the entire blind population or 20% of the employable blind persons in the area. The type of merchandising business for a particular blind person depends upon the type of person that is involved and the sense of responsibility in the mind of the administrator of the agency for the blind. Every neighborhood in a large city and every small town has its possibilities for merchandising. One man in a small town was trained to sharpen saws because he is a good mechanic, and he is supporting his family by sharpening tools for sighted mechanics and repairing farm machinery. A grocery store is operating on a country road in a southern state where it seems to be alone at the side of the road, and yet the farmers buy enough groceries and household articles to enable the blind manager to make a good living. A man in a large city is a broker for paper, twine and similar supplies and calls upon his customers in the same manner as though he were sighted. A man in a small city in the center of a large state has earned his living and supported a family for many years selling carbon paper, typewriter ribbons, ink, and other office supplies.

The possibilities of employment for blind persons in merchandising are limited only by the imagination and the acceptance of responsibility by the administrators of agencies for the blind.

TRAINING AND EMPLOYMENT OF BLIND PERSONS AS TELEPHONE SWITCHBOARD OPERATORS

F. W. Gust, Siemens & Halske Aktiengesellschaft,
Wernerwerk für Fernmeldetechnik, Speyer/Rhein, Germany

I am very happy to have been afforded this opportunity to speak to you. For more than fifteen years I have worked in a voluntary capacity on the problems which are the subject of this discussion, and I must confess that these things have aroused and always attracted my attention and sincere interest. I emphasize this because it is my belief, that although a man with sight working with his brains only can accomplish many things, the persuasive power necessary to convince his fellow-men, the drive and energy to overcome all difficulties, and the will to achieve ultimate and complete success, can come only from the heart.

I shall subdivide my subject into the following three sections:

1. The history of development.
2. Basic technical requirements.
3. Training and professional work.

HISTORY OF DEVELOPMENT

It is a matter of fact that blind persons have, in a few instances, been employed as telephone switchboard operators since about 1920, that is since the end of World War I. But at that time the operating of telephone switchboards could in no way be considered as a special profession for the blind, since the cases of employment were rather accidental and not due to organization and planning. The reason for this is twofold:

The technical systems of that time were too complicated to be operated by blind persons.

No technical aids to overcome these difficulties were known.

From today's point of view these early cases of employment might be considered an encumbrance had they not revealed positive aspects, that is to say, stimulated telecommunication engineers to tackle these problems and to bring about a change.

Two events, one political and one technical brought about the change which made telephone switchboard operating a special profession for the blind.

The technical event was that during the years after the first world war in extension-board engineering, the obsolete connecting-system with cords and plugs was gradually replaced by a new method using only keys and switches. The term "extension-board engineering" or "private branch exchange engineering" comprises — at least in Germany — all telephone

equipment necessary to maintain telephone communication within a factory, an administrative building or a business house, and also for traffic to and from the so-called public telephone exchange, that means with all other subscribers outside. Fortunately these modern installations could easily be equipped with technical aids for the blind operator thus opening a vast field of activity for the intelligent blind.

The political event I mentioned were the victims of the second world war crowding the military hospitals soon after the outbreak of the war. This event compelled the technicians to tackle this great problem. The war laws of that time facilitated their work in many ways.

What were the details of the task?

1. It was to be determined which type of switchboard could most easily be operated by blind persons and at the same time was or would later be used in sufficient numbers to warrant employment of blind persons to a satisfactory degree.

2. For this type technical aids had to be designed, tested in co-operation with blind persons and finally developed for manufacture. These aids, however, had to be applicable not only to newly manufactured switchboards but also to switchboards already installed and in operation. The alteration of these switchboards for operation by the blind had to be done without causing any interruption in the operation and at moderate cost.

3. Basic material for instruction had to be created and training facilities had to be established, in order to begin instruction while still in the convalescent hospital.

4. Situations had to be found, which would be available to the blind as soon as they had finished training and were dismissed from military service and from the hospitals.

Actually, towards the end of the war, four hundred war-blind were employed as trained telephone operators by private firms and administration authorities.

Almost simultaneously and in a similar way, the work for the civil blind living in special homes and attending schools for the blind was begun, for it had been determined from the first that this promising profession should not be reserved for the war-blind only, but it should be open to all blind persons who could meet the mental and physical requirements.

BASIC TECHNICAL REQUIREMENTS

In Germany two systems of switchboard engineering were in use

1. One with plugs and cords.
2. The other without plugs and cords.

It was easily determined which of the two systems was to be used. A blind person operating a switchboard of the plug-type is inefficient because even with the utmost skill he can control only a relatively small number of connecting plugs. This means in practice that, from the budget point of view, such a small switchboard would not justify the employment of a telephone operator. We had to be very careful that the firm employing a blind person would have no extra expenses just as we had to see to it that neither the precision nor the tempo was under par.

The present development has shown that we were on the right road. At least in Germany plugless switchboards have acquired great extension. Indeed, their number has become so great, we could not man them all by blind operators. Thus we do not think we need occupy ourselves with unsuitable systems as long as there is a reserve of potential situations which will be sufficient in any case. We allow an occasional exception. There are a few instances of blind persons operating plug switchboards.

The technical aids to be designed fell into three groups:

1. All signal bulbs had to be replaced by devices with an indicator, the different signalling positions of which could be detected by feeling. This means the switching on or off of a signal, or slow and rapid flashing had to be as easily perceptible to the blind as is the visual signal to the seeing operator. The tactile indicator which has been developed for this purpose meets this requirement perfectly. It has been designed — as far as possible — similar to the telephone signal lamp and it can be installed in place of the latter without using tools or soldering or altering the connection lay-out. This is of decisive importance for the question of cost. The tactile indicator is a solenoid, that is a small brass tube which bears an electric coil. When electric current is passed through the coil, the armature, a metal bar located in the center, is lifted out of the tube by a few millimeters. Analogous to the signal lamp flashing on, the tactile bar stands out from the tube. The flashing signal of the lamp is replaced by the repeated lifting and drawing back of the tactile bar. This is effected by repeatedly switching on and interrupting the electric current flowing through the coil of the tactile indicator. The frequency of interruptions and thus of the back and forth movements of the indicator bar can be chosen at will.

2. The single sound signal in switchboards for seeing operators, which calls the operator's attention had to be replaced by a multi-sound signal system, the different sound of which clearly indicated the stage of operation thus instructing the blind person of the operation at hand.

Let me mention just a few examples: The ringing of an alarm means "There is a call from the public exchange"; The sound of a buzzer means "An extension is calling"; An interrupted alarm signal signifies "Operator enter into connection!"

This task which consisted mainly of wiring problems was relatively easy to solve and therefore involved only slight cost. But the assurance which the sound signal system gives the blind operator is great, owing to the fact that he perceives as quickly as the seeing operator what functions are going on at the switchboard. By means of three to five different sound signals all functions can be clearly indicated.

3. Simple metal bars, so-called finger guides, which are applied at the vital points of the panel, help the blind operator to find certain keys or switches. For easier orientation these finger guides bear small marks at certain points. The blind operator will probably make use of these aids, at least in the beginning. Later on when he has more routing he can do without them and they can then be removed. These expedients are to be applied only if examination of the person has shown that it is necessary or useful.

TRAINING AND PROFESSIONAL WORK

The subjects of instruction are to be divided into two basic groups:

1. Theoretical instruction.
2. Practical training.

Curricula for the theoretical instruction have been composed which include all the necessary subjects. These subjects are: Basic knowledge of the different telephone systems, postal rates, kinds of communication, method of speaking, examples of organisation, making and use of directories, calculating and checking of rates and other subjects. For practical training, model installations were built by which switching operations of plugless switchboards could be realistically imitated. Such a model installation consists of two panels, one for the teacher and one for the pupil. By operating the keys and switches of his panel the teacher can reproduce any problem which might occur in practice. Also the audible signals which the instructor switches over to the panel of the trainee and to which he must react correspond to reality. Communication between the teacher and the pupil is maintained by telephone in order to accustom the blind to the use of normal or head phones.

Such a training apparatus is not connected with a live switchboard but is in itself a technical instrument. Due to the separation from live plants, operational errors which are inevit-

able in the beginning never cause disturbances and every function can be repeated as often as is required until the pupil has attained the necessary skill.

With the aid of palpable models of the connection lay-out the functions of the telephone exchange are explained to the pupils as far as is necessary. Practical instruction also includes the "scanning" and sometimes the dismantling of the component units of such an installation such as selectors, relays, switches and keys. By means of various models, the pupil becomes acquainted with these component parts, to the extent required by this future profession. Certainly the pupil must not be overloaded with too much theoretical knowledge but on the other hand, he should have a sound knowledge of the apparatus which he is going to operate for years and years of his professional life. Learning must not be made too easy for the blind person, in order to make him feel that he has attained his new profession by hard work.

The methods of instruction, which have been developed within private initiative, have been checked by German labour authorities through a special committee of experts. This led to the creation of an outline of the profession and examination regulations for blind telephone operators. It may be useful to know the text of these official directions.

The training of the blind and almost blind for their profession.

Period of training — The length of the training period depends on the individual capacity and the availability of training facilities.

Scope and Characteristics of the Occupation — Operation of key-, switch-, or plug-controlled telephone extension boards with usually up to ten exchange-lines and three hundred extensions in order to connect the exchange-lines with the extensions. Registration of emanating town- and long-distance calls by means of the braille typewriter or braille writing board and copying in normal writing. Receiving and passing on of telegrams; receiving and writing down of messages for persons, who are temporarily absent; giving of information, check-ups, etc.

Qualifications — Physical qualities: perfect hearing; good articulation; sound respiratory organs; manual skill; well-developed touch-sense; nervous system that can stand high strain.

Mental and psychological fitness — (It is the duty of the operator to establish the first personal contact between the caller and the firm, and the impression he makes may influence the caller's attitude towards the firm in a positive or negative

way.) High intelligence; good memory; power of quick reaction; agile mind (ability of attending to several matters simultaneously) combined with power of intense continued concentration; good sense of orientation and memory for numbers; good co-ordination of perception and movement (hearing and touch sense); good manners; even disposition; self-control; friendliness; sense of responsibility; discretion.

Knowledge and skills to be imparted to the blind during the training period — Braille shorthand and typewriting. In addition to this: Complete theoretical knowledge of switchboard technique; basic knowledge of the telephone and telegram rates. Desirable: Rudimentary knowledge of braille shorthand.

Examination standards — For admission to the examination a minimum age of eighteen is required; fluent writing and reading of braille; minimum requirement in normal typing, 150 strokes per minute; in braille, 60 to 80 syllables per minute; basic knowledge of telephone technics; practical mastery of one particular exchange system; knowledge of the other systems; knowledge of the different classes of telephone calls and telegrams; calculation of rates.

The profession is equally suitable to men and women.

I should like to refer specifically to the three most important points in the Civil Service est Requirements.

The Test Rulings state: The applicant must give evidence of his knowledge and abilities through a written and oral examination.

1. *Examination in Communications Engineering*

The following shall be required of the applicant in this examination:

- A. A sufficient knowledge of the technical and operational functions of telephone engineering.
- B. Familiarity with the most important regulations of the Telephone and Telegraph Codes.
- C. Knowledge and mastery of the switchboard technique.

2. *Skill Examination*

The Skill Examination should decide whether the applicant possesses mastery over the following:

- A. Practical switchboard work.
- B. Fluent reading and writing of the Braille System.
(60-80 strokes per minute)
- C. 100 strokes per minute are required for typing.

3. *Examination Certificate*

If the applicant passes the examination, he is given a certificate which is granted by the Chamber of Commerce and signed by all members of the Examination Committee.

The certificate should attest only that the examination has been passed and give data as to the type of equipment for which the applicant has been tested, for example:

- A. Small system — About 5 exchange lines and 50 extensions.
- B. Medium-sized system — About 10 exchange lines and 100 extensions.
- C. Large system — Over 10 exchange lines and 100 extensions.

The advertising for situations is the task of the labour and welfare authorities. The institutes for the blind and the telecommunication industry join in the efforts of the authorities if they think it necessary or useful. Frequently, organizations of the blind help to find situations. The German law concerning disabled persons offers some means and ways to promote employment of blind persons as telephone operators. German firms and authorities are required to fill a certain percentage of their positions with mutilated persons. The employment of a blind person rates doubly. In most cases the welfare organizations grant financial indemnities for the retraining of the personnel and for the reconstruction of old installations or the extra costs resulting from the installation of new systems.

By making use of all these ways and means about 1000 blind persons have been employed as telephone operators in Germany. They are happy in their new profession and their employers are satisfied. We have received many expert reports saying:

"The carefully trained blind person is an operator as good as the seeing one, in many cases even a better one. His ardour in his work, his loyalty to the firm, his power of concentration are an advantage to his professional work which can be felt every hour and every day. For this reason the salary of the blind operator is not less than the standard of his seeing colleagues."

Many hundreds of suitable, that is plugless extension boards, are still available for the employment of blind operators and their number is increasing. In seven training institutes more and more blind persons are being trained and gradually absorbed by the labour market.

We are not interested in a too rapid development of this profession. We are in favour of a sound and safe development. The more carefully technicians and teachers and welfare officials work the less is the danger of a set-back. As yet there have been practically no set-backs, and that is what makes me happy and binds me closer and closer to the task which, during the past fifteen years, has become a matter in which I take sincere and heartfelt interest.

RESOLUTION IX

The World Council for the Welfare of the Blind believes that the fundamental training and readjustment of indigenous rural populations should be primarily effected with due regard to their family and community backgrounds and, in the case of newly blind adults, to their past employments (usually as small-holders and village craftsmen and, in the case of women, as domestic rural workers), by providing training centers for this specific purpose, instead of concentrating them in cities and towns to be employed in sheltered workshops.

The Council therefore recommends public and private authorities in such areas seriously to consider the Pilot Scheme, known as the Shamba Training Scheme, at present being conducted by the Uganda Foundation for the Blind, working in co-operation with the British Empire Society for the Blind, the object of which is to provide adaptive training to blind men and women Africans in simple, practical agricultural pursuits in familiar surroundings.

The Council suggests that in such areas, where road access makes it possible, Red Cross or other workers might be organized to do home visiting chiefly for the purpose of instructing parents how to care for young blind children.

NINTH SESSION Tuesday Afternoon, August 10, 1954

ECONOMIC SECURITY FOR THE BLIND IN THE 20TH CENTURY—PHILOSOPHIES AND METHODS

Chairman: Dr. Charles Bennett, President, Australian National Council for the Blind, Prahran, Victoria, Australia

ECONOMIC SECURITY FOR THE BLIND IN AUSTRALIA

From the International Conference of Workers for the Blind held in Oxford, England, almost exactly five years ago, came the following resolution, unanimously adopted:

Special economic provision should be made for all blind persons, while ensuring that the incentive to work and to contribute in other ways to the economic and social life of the community is in no way impaired. Each nation should therefore provide its blind citizens with:

1. At least a minimum standard of subsistence.
2. An adequate allowance of equal amount for all blind persons to meet the additional cost of living resulting from blindness.

Such special provision for the blind may be embodied in a general programme of social security, or may be expressly made for the blind.

Taking this as the ideal to be striven for, what then has been done for the blind in Australia?

Some sense of responsibility for the adult blind was evidenced by Australian statesmen quite early in the Twentieth Century, for almost immediately after the introduction of Aged Pensions in 1910, provision came for the blind in 1911, an amount of 10/- per week being granted. At first it was for a very limited number of blind persons and they were not permitted to earn anything at all and still receive the pension. However, this aspect lasted for only a few short months when blind persons were permitted to earn an amount of 10/- per week. Invalids were not provided for until 1919. Pensions for the blind were increased from time to time and permissible income also increased over the years, but it was not until 1952 that the first big step took place. In that year the means test for blind persons was practically abolished and pensions for the blind became recognized as special provisions for the additional cost of living resulting from blindness.

The present position of the adult blind is that all permanently blind persons are eligible for a pension of £3 per week free of any means test. Additional pension up to 10/- per week is payable subject to the means test applicable to blind persons. Where a blind person receives income exceeding £10 per week

(including any income of the person's husband or wife, except where they are legally separated or in other special circumstances) the maximum pension of £3.10.0 per week is reduced by the amount of the excess income, but not below £3 per week. Where both husband and wife are blind, the maximum pension of £3.10.0 per week is reduced by half the amount by which their combined income exceeds £10 per week, but each pension cannot be reduced below £3 per week.

There is a property means test for blind pensioners, just as there is for other invalid pensioners, but any deductions on account of property and income cannot reduce a pension below £3 per week. Free treatment by doctors, medicine and hospitalization are also available for all blind persons. Pensions for the blind have always formed part of a general programme of social security with special provision for the blind embodied therein.

This then is the extent to which the Federal Government has accepted responsibility for the blind, but the various State Governments have, since the early 1860s, been concerned with their welfare though financial assistance has been directed through the various voluntary organizations which have been constituted for that purpose.

We are, however, more concerned with the growth of economic security for the blind in this century. If we could look back to the early years of this century we would find that institutions and organizations were known as asylums and because this word was used, the blind were looked upon as being not only without sight but also having some degree of mental retardation if not actual mental deficiency.

This state of affairs lasted until about 1925 when, as funds were raised by the voluntary organizations, opportunities for blind people to enter the field of higher education became practicable from a financial aspect. Fifteen years later little progress had been made in the battle to place the blind in professional fields, but with the outbreak of World War II and its resultant shortage of manpower, openings in the industrial field became available and much greater opportunities for the placement of the blind in sighted workshops were opened. These opportunities were firmly grasped by the institutions in every state and as a result there are some hundreds of blind people in Australia still engaged in open industry.

The position in 1954 from a professional angle is little different from what it has been over the whole of the century, though there are a few fortunate blind persons who have been able to be placed in professional occupations. The vast majority

of these few would never have been so placed had it not been for the tremendous efforts that have been made by the voluntary organizations in each state (except Queensland) since 1917, for little financial assistance has been made available from the state governments. Even in Queensland, however, voluntary organizations here made a valuable contribution in every sphere except education and the sheltered workshops. In Victoria, for instance, where by far the greatest scope of blind welfare work has been undertaken, the Institute was founded in 1866 and at that time received a grant from the then government of £2,000. This amount has not varied greatly over the intervening 88 years, for the grant for the past fiscal year was only £3,000 despite the fact that the burden of caring for the blind has tremendously increased over that period.

Some blind people have been accepted in the professional field with some degree of reservation and others have been completely unsuccessful despite academic careers of which many sighted people would be justly proud.

In all cases the institutes have been prepared to back their opinions to the utmost and in one individual case the Victorian Institute paid the salary of a blind student who had successfully obtained his degree of Bachelor of Arts and the Diploma of Education for twelve months whilst he taught in a sighted grammar school in a neighboring state and proved his ability to successfully hold down his position as a teacher.

Generally speaking, the outlook for the adult blind has been improved almost entirely through the voluntary agencies who have successfully raised the necessary funds from the public for the purpose. Employment, either in open industry or in sheltered workshops, has given all employable blind people the opportunity of a standard of living which fifty years ago would have seemed impossible. Blind beggars have almost entirely disappeared from the streets and those that remain have no economic need for doing so, for employment in either of the avenues just mentioned has removed the necessity for them so doing.

For those who have not the capacity for employment, other voluntary agencies have provided financial assistance, homes and hostels and other forms of assistance to ensure their economic security. Economic security, however, starts from the birth of the blind child and in this regard Victoria has taken the lead from all other Australian states. Just twenty years ago, a blind babies nursery was established in Melbourne and the value of pre-school education has been obvious almost from the opening of the nursery. Three years ago a nursery was opened in Sydney,

New South Wales, and undoubtedly will provide a valuable training center for the blind babies and toddlers who will pass through it.

With regard to the education of the blind child, until comparatively recent times this has remained in the hands of the voluntary organizations and in Victoria and South Australia is still in the hands of these agencies, but the care of the child in the out-of-school periods remains, except in the state of Queensland, the responsibility of the voluntary agencies. Higher education opportunities, studies at the various universities with the resultant obtaining of degrees and opportunities of entering the professional fields have all been made possible despite the fact that there has been no state government financial aid for the purpose.

For those who are not academically inclined there is the open or sheltered workshop, with the latter offering at least some standard of living irrespective of the earning capacity of the blind worker. To the vast majority of employers, the thought of blind people being employed in sighted industry still, unfortunately, appears to be somewhat visionary and almost certainly an uneconomic and over-ambitious project despite the fact that, as previously mentioned, for many years blind operatives have been profitably engaged in various types of industrial positions.

For many years the Institutes in Australia attempted to convince the employers that such placement was a payable proposition but it was only the recent World War with its resultant shortage of manpower, which provided the opportunity for the blind to demonstrate their capabilities, and taking advantage of this opportunity many blind people were so placed.

With the passing of the years, more and more blind people were suitably employed and they have proved to be an economic proposition to their employers by maintaining a high degree of efficiency. Up until this time the range of jobs that it was thought the blind could do was extremely restricted, but then and since, this range has been considerably widened, though it is still a major operation — despite the fact that blind operatives are available for interview by prospective employers or those who have grave doubts of their capacities — to convince employers that blind people can and do undertake many of the repetitive and other processes that were hertofore thought possible of being undertaken only by those with full sight.

The sheltered workshop is always available for those who are employable and in various states payments are made which guarantee a standard of living for all blind people who are employable.

In some cases the rate paid is so high that there is, unfortunately, little incentive for the blind worker to achieve anything except the minimum amount of output for the money received. When, in addition, there is a scheme of long-service leave, superannuation, housing loans free of interest, sick payments and the like, one is apt to wonder if too much is given for too little return. Abraham Lincoln aptly states in one of his many speeches, "You cannot build character and courage by taking away a man's initiative and independence." In view of the attitudes that some of the blind take towards their responsibility one cannot help but wonder if through this system of payment one has not removed the backbone and left them only a wishbone.

Surely the acceptance by blind people of the maximum amount for the minimum effort is to be deplored, and possibly character and courage have been removed from those who will not exert their initiative and capacities towards independence. For it must be remembered, these amounts come from funds that have been contributed by an earnest and sincere public for the welfare of the blind.

For those grown too old for employment, there are organizations as well as institutions which make financial allowances, provide occupational therapy centers and, upon death, funeral allowances, whilst for the unemployable there are social and occupational therapy centers and financial grants made.

What is the overall picture of the blind person's economic security in Australia?

For the employable there is an assured income in a sheltered workshop producing goods which must be sold at a loss in competition with sighted, imported or machine made goods, but this income can be assured only so long as the generous public contributes the funds necessary to make up the deficiency between the cost of production and the price at which the goods produced must be sold in order to dispose of them, and although the voluntary organizations in Australia have done a job for which the highest praise would not be too high, there is the dread specter of what would become of the blind were it not for these voluntary agencies.

The Federal Government has at least made a provision for the special needs of the blind by providing pensions which make up for the added cost of living for the blind. Apart from this, and in some states the provision of teachers in schools attached to the voluntary agencies, were it not for what has been done by the voluntary agencies the economic position of the vast majority of the blind in Australia would indeed be in jeopardy, and one

cannot help but wonder what might happen if, through any cause whatsoever, the fountain of charitable giving were to dry up, and the blind left to the care of the State.

Generally speaking, with an intense belief in the humanitarian outlook of the public for those less fortunate than themselves, we might feel some contentment in the knowledge that for most, at least, of the blind in Australia, there is some degree of economic security due, almost entirely, to those great citizens who have found it in their hearts to make available the funds through which the blind have been so placed.

ECONOMIC SECURITY THROUGH FINANCIAL ASSISTANCE TO THE BLIND FROM PRIVATE OR GOVERNMENTAL SOURCES

Captain M. C. Robinson, Superintendent, Western Division,
Canadian National Institute for the Blind, Vancouver,
British Columbia, Canada

The original of this paper employed some nine thousand words. Its present form, therefore, is a condensation of the original. With all the shortcomings and abruptness of passage from one phase of the subject to another, common to most, if not all, condensations, I feel greatly honoured in being invited to present a paper on a subject of such vital importance and one which I believe is uppermost in the minds of the overwhelming majority of the blind people throughout the world — that of economic security for the blind in the twentieth century.

From time immemorial blindness has been recognized as one of the most tragic and crippling of disabilities. Today, there is a danger of the general public discounting the tragedy of blindness because of the widespread publicity given to the few outstanding persons who have won "victory over blindness." Such persons personify the goal towards which we are all working — but the goal is as yet far distant for any but a very small minority. Our aim, therefore, must be to advocate economic security and rehabilitation measures which will enable and encourage the maximum number of blind people to reach this goal. A sound, and in some instances, long-range educational programme for the public, governments, and the blind people themselves, is necessary to accomplish our end.

In preparing this paper I have not attempted to deal with the subject on the basis of individual countries. We are here representing many countries. Some have already reached a few of the goals which call for urgent action elsewhere. Our feasible claims for the blind cannot be considered apart from the stage of growth of the general security system in any one country, or the traditions and forms peculiar to that country.

So far as our subject is concerned, I think the twentieth century will turn out to be not one age, but perhaps three or four. The last 25 years or so have been a period of revolutionary change. Sometimes we have seen greater differences in a few years than occurred during centuries.

At no time in history since the invention of Braille have such important developments occurred in the economic security of the blind. The disasters of war and economic depression have had a great deal to do with this, and for this reason a good many of these changes have come in quick rushes rather than in a steady move forward on a solid front. In theory or in fact, the blind are now benefitting from many new security programmes now available to all members of the community. Unfortunately, there are still many discrepancies between the theories and the facts.

During this period there has been an awakening and some consciousness of the peculiar and particular needs of the blind. All too often, however, those of us involved in the welfare of the blind have seen and acted on the immediate need of the individual blind person, the blind people in our communities, or in the country as a whole, without taking into account the overall need, or the effect our immediate objective might have on the ultimate and satisfactory programme of economic security.

This is a scientific age. It therefore behooves those of us concerned in work for the blind to take a scientific approach in developing our conception of an adequate economic programme. In developing this conception it might be as well at this point to refer to a few principles set out by a technical working party appointed by the United Nations and its Specialized Agencies to outline a programme for rehabilitation of the physically handicapped as follows:

That the handicapped person shares full human rights with the able-bodied; is entitled to every possible measure of protection, assistance and opportunity for rehabilitation; has a special claim on society for sympathy and constructive help because of the emotional and psychological dangers to which he is exposed; is capable of developing his residual resources to an unexpected degree if given the opportunity, and of becoming an economic asset instead of a burden in most instances; that the handicapped person has a responsibility in his turn to contribute to the economic welfare of the community after he has been rehabilitated and trained; and that he has a deep longing to achieve independence in a normal community instead of being segregated and kept in an environment of disability; and finally,

that his rehabilitation requires the combined teamwork of many different services.

A number of countries recognize supplementary allowances on account of blindness, and these are given over and above the basic social assistance provisions. In other countries, while no supplementary allowance is paid on account of blindness, some of the blind benefit over and above other categories by means of a more generous permissible income provision and/or special exemptions under income tax regulations. Mr. Ernst Jorgenson, in a published article, "A Danish View of Allowances to the Blind Without Means Test," in the American Foundation for the Blind's *New Outlook*, has given us an excellent interpretation of the reasons why an allowance in recognition of the extra and unavoidable lifetime expense for personal and other services is the only feasible means by which the blind can be put on a minimum footing of equality with sighted people, including many with other physical handicaps.

In a changing society, economic security must be thought of as a movable rather than a fixed conception. The forms and methods through which economic security is provided must be diversified to meet the requirements of the groups to be served. In a good many countries with advanced social legislation the principle of equality for persons with recognized handicaps is now consciously accepted in the security system. How to achieve practical equality is another matter, and one of our central problems in some countries today lies right here. The principle will only be applied within the range of generally understood facts concerning the handicapped group. If the blind person is still only seen in the popular mind as a helpless dependent, or if his potential rehabilitation is seen only in a few of its more obvious and limited aspects, the security measures designed to provide equal treatment for him will be limited to such conception.

I do not want to paint too gloomy a picture on this question of equality. We can point to numerous examples of intelligent applications of this principle, but they tend to be local rather than general. When we approach our legislatures they sometimes seem to us to be over cautious in their fear of establishing a "precedent" which might involve them in some unforeseen commitment. They take refuge in the position that they must treat all groups in the community "alike," and what they are really doing is substituting the idea of uniformity in social security measures for the principle of equality which cannot be applied by making one set of rules for everybody. On the other hand, I for one, can testify to a great deal of experience to the

contrary. Our parliamentary and government leaders working for the public good are just as often away ahead of the popular understanding of what needs to be done, and have given invaluable assistance in working out the means by which it can be accomplished.

But in a free society this is limited to what can win popular support. If we are to be efficient advocates, we must work to close this gap between our own, or government recognition of what needs to be done, and the popular convictions, or lack of convictions, on the same issues. It will not be sufficient merely to advocate new measures. The obstacles to progress also include some ill-devised or outmoded forms of social assistance which are already in our statute books. They perhaps represented the best we could get at the time, but now stand in the way of something better. Yet, proposals to throw them out and re-design the whole plan may cause initial anguish and a great outcry from the people immediately affected who cannot perceive or accept the ultimate result in the overall good for all. We will have to work courageously with our legislators on this side of the problem also, and realize they will welcome this kind of help, and that they need it, to free their hands in working out a more up-to-date design for economic security.

The present trend of governments in dealing with economic security and rehabilitation of the handicapped is to include the blind with the general disabled group. While there are arguments in favour of this, there is a danger that improved conditions for the blind may be slowed down to keep them in line with other groups. In many instances the blind have pioneered in the development of security provisions, and I think it would be a pity if they lost their standing as pioneers in this field. On the other hand, we must not expect security for the blind to be carried too far ahead of the security for other groups in any given country. Sometimes it is found necessary to advance the general economic security of the country as a whole before achieving specific advantages for the blind.

To these remarks on the question of practical equality I might add one more. We are living in a mobile age and a visual one. New visual aids to learning have brought revolutionary changes. Almost every new gadget invented for the sighted community presents a new problem for the blind person to master in his race to keep up with the times. This makes it all the more difficult, and all the more imperative, that security measures for the blind are kept in step with these fast moving times.

There is also a need within countries, and on an international

scale, for compiling, analyzing, and exchanging information on our accumulated experience and data which will have a direct bearing on our problem. For instance, in the International Labor Organization paper on "Special Allowances for the Blind," it makes a blanket statement that in Canada allowances are made to the blind, subject to the means test, providing the overall income of a single blind person does not exceed \$840 a year. This is a minimum ceiling. In the particular part of Canada in which I live, a local government or a recognized social agency, may and does augment this figure by any reasonable amount, and the employed blind person is allowed guiding expenses without same being considered as income. I mention this merely to indicate the erroneous impressions which may be created by studying a mere synopsis of basic statutory provisions, and to stress the need for exchange of detailed information between countries.

There is also a need for the closest possible co-operation and respect between governments, their departments dealing with the welfare of the blind, and private agencies concerned with the welfare of the blind. The private agency in many instances is able to accomplish certain objectives more economically and to much better advantage than a government department. It is the government's responsibility to recognize this, and to encourage such agencies by financial assistance, and otherwise, in the carrying out of such programmes. On the other hand, private agencies must be courageous in giving up and handing over services which are now logically a state function. I would like to refer again to the very fine paper of the UN technical working party on a programme for the handicapped. They underlined the wide range of services and the many fields of technical knowledge that are essential to any overall approach to the problems of the handicapped, the distinct necessity for both public and private programmes, their interdependence, and the practicability and success of their co-operative undertakings when they are willing to join forces in the spirit of one task force.

And now, I would like to submit my conception of an economic security plan for this period of the twentieth century.

Our objectives for economic security cannot be expressed by a set of figures. All of the pensions, allowances, and grants in the world will not satisfy these objectives if they fail to take into account that we are concerned with the whole man — his spiritual, emotional, intellectual, physical and social development, the employment of his skills, the full exercise of his capacities, enjoyment of human rights, and his intrinsic value as a member

of society. He shares the needs and aspirations common to others, but is deprived of many important means through which they acquire their knowledge and experience, pursue their vocations, develop their capacities, are enabled to take part in group activities, and are stimulated or influenced in their adjustment to social life. In his isolation and frustration, the blind person is exposed to unusual psychological dangers which further impede his normal development and social adjustments. All of this spells out the necessity of adequate economic security and rehabilitation.

There are in my opinion three essential factors to be considered in accomplishing this end.

The first, is an adequate system of public maintenance, according to need, for the large majority of the blind, who cannot be self-supporting in part or in full, to cover the basic requirements of food, shelter, clothing, and medical care. We cannot get very far in any direction without this, and I think we must accept the fact that it will be variable help, according to need, as it is for other elements of the population.

The second factor is of great importance, both to those whose circumstances warrant the basic maintenance allowance referred to above, and to those who have emerged, or are capable of emerging, from total dependency to financial independence. This is a universal "expense of living" allowance to all adult blind free of the means test, and to compensate, in at least some degree, for the extra and unavoidable lifetime expense for personal and other services with which all blind persons are confronted.

In my introduction I mention that our aim must be to advocate economic security and rehabilitation measures which will enable and encourage the maximum number of blind people to win their "victory over blindness." This "expense of living" allowance free of the means test would go far in assisting people to this end. Their example may be the key to new opportunities and greater economic security for thousands of others as the years go by. We have by no means reached the last frontiers in the economic reestablishment of those who can become fully supporting.

To be effective, this allowance must not be taken into account by the authorities when granting basic maintenance, or considered as part income for those who are able to supplement their basic maintenance within the prescribed "additional income" clauses set out by the government concerned. In other words, it would be given automatically to any person who came within the recognized definition of blindness, regardless of financial circumstances.

The third factor is rehabilitation. The idea of rehabilitation

and its association with our aims for economic security, needs to be kept in the forefront, and completely tied in with the measures we propose. Furthermore, the scope of rehabilitation needs to be interpreted in broader terms than the popular conceptions of the vocational workshop, and learning to read Braille, and walk with a white cane. It must be geared to fit the individual need on the basis of the whole man.

If such a programme can be established for all blind people, it will go far in compensating for the loss of what has been described as the most precious treasure of physical attributes — sight.

Discussant: H. A. Wood, Executive Secretary, North Carolina Commission for the Blind, Raleigh, North Carolina, United States

It is reasonable to assume that the members of this general Assembly of the World Council for the Welfare of the Blind endorse in principle the recommendations regarding the economic condition of the blind, adopted by the International Conference of Workers for the Blind held in Oxford, England, in 1949 that:

“Special economic provision should be made for all blind persons, while insuring that the incentive to work and to contribute in other ways to the economic and social life of the community is in no way impaired. Each nation should therefore provide its blind citizens with:

1. At least a minimum standard of subsistence.
2. An adequate allowance of equal amount for all blind persons to meet the additional cost of living resulting from blindness.

Such practical provision for the blind may be embodied in a general program of social security or may be expressly made for the blind.”

It has seemed to me, however, in thinking about the goals for a program of economic security for the blind, that these recommendations do not give proper recognition to a third but vital ingredient — rehabilitation service. I fully recognize that the aims of the rehabilitation program are not necessarily limited to providing a blind person the means by which he can secure for himself a modicum of economic security. Certainly, however, no treatment of this subject should omit this factor, and I am pleased to note that in Captain Robinson's excellent paper this element is given the important place it should have in any system which aims for the provision of adequate economic security for the blind.

The methods we employ to accomplish this objective and the rate of our progress necessarily vary with the complex and changing social and economic conditions which prevail in each country, and it is my belief that no one method or approach to the achievement of economic security for the blind can be pointed to as the best for universal adoption in all countries.

In the United States the development and growth of measures for economic assistance to the blind has been influenced essentially by the same considerations which characterize the programs of economic assistance to other groups in the community, culminating in the Social Security Act of 1935 which established a national public assistance program for 3 classes of economically disadvantaged persons—the aged, the blind, and dependent children—and in 1950 added a fourth group, the permanently and totally disabled. Under the Social Security Act, the Federal Government makes grants to the states to help them to finance public assistance. Although there are certain common characteristics as between the state programs functioning within the conditions of the Federal grants-in-aid, the individual states have wide latitude in deciding how the programs are to be organized and administered, who is eligible for aid and how much aid such persons shall get. This pattern of Federal-state co-operation is in keeping with the nature of our constitutional government. The Constitution created a central or national government to which certain specified powers were delegated by the states. Those powers which were not so delegated, however, are reserved to the states and are zealously guarded by them. Very early in the history of the United States, the Federal Government had made grants of land or funds to the states to assist them in carrying out certain services that had a national interest. Thus, the Federal Government saw to it that public schools would be established in the townships of the future states, but it left control of the public educational system to the localities and the states. The Federal Government undoubtedly could have carried on many of the activities for which grants have been made, acting under its delegated powers. The decision to leave operation of a particular service to state and local control has been largely a matter of policy, in keeping with our tradition of local enterprise, initiative and democratic controls.

Within this setting evolved the American system of public assistance. Each state adopts, under the broad conditions of the Federal act, a standard of economic security or essentials for maintenance against which the needs of the individual blind person can be determined. The level of maintenance which the standards provide are largely dictated by the economic resources of the state and the demands which the various governmental services furnished by the state make upon the resources at its disposal. Generally the standards in the state programs for aid to the blind provide for the basic items of maintenance which are universally required by all persons, such as food, shelter, clothing, household supplies and various miscellaneous items and extend beyond these to special items needed according to the circumstances of the individual, particularly because of the handicap of blindness. These

will include such needs as special medical care, education, guide service, telephone, laundry, transportation, etc.

We see in this the structure, a method of meeting personal needs which comprises both the common maintenance factor and the "Expense of Living Allowance" to which Captain Robinson has referred. The method, however, is based upon an individual consideration of the needs of the blind person, taking into account his own resources for meeting any or all of these needs. This approach, it seems to me, makes it possible to achieve two important things: (a) to assure that, as among all blind persons, each will have his economic needs equitably considered and (b) to make the maximum use of the limited financial resources available for aid to the blind by channeling them toward those persons who have not yet been able to achieve an acceptable standard of maintenance rather than spreading them over many who do not have a realistic need for governmental supplementation of their private resources.

Today in the United States persons receiving aid to the blind probably represent one-third of the blind population of the nation, which is estimated to number about 320,000 (Hurlin). Funds for aid to the blind, as we all know, are not easy to secure and it will readily be seen that the level of maintenance would be seriously depressed if the funds we are able to secure are drained off to furnish an arbitrary compensation to all blind persons regardless of whether they truly need this "Expense of Living Allowance." I would think it wiser and, in the long run more constructive for all blind people, that such increasing financial resources as we may command be devoted toward the continuous improvement of a standard of maintenance which will adequately meet both the general and special needs of blind persons and be used also for extending services to help them with opportunities for even greater economic security.

Our experience has been that a system of individually determining the amount of payment based on a standard which includes regular maintenance as well as special needs, makes possible a greater degree of administrative flexibility in adjusting the allowances to the actual current costs of these items. Universal fixed allowances, whether for general maintenance or for special needs, implies legislative action, the machinery of which is cumbersome and traditionally lags in these matters behind prevailing economic conditions.

It will be of interest to note in this connection that national expenditures for assistance to the blind under the Social Security Act totaled almost \$66,000,000 in 1953, of which 50% represented the Federal share. This represents an increase of approximately 4½ million dollars over the preceding year and increases of \$8,7000,000 and \$3,500,000 over 1950 and 1945, respectively. Av-

erage monthly money payments for approximately 100,000 blind persons in March, 1954, were \$54.06 as compared with an average of \$53.71 for the same month in 1953. In March of 1950, the average payment was \$46.20 and in 1945, \$29.59. These increases not only served to keep the payments in line with the rise in cost of living, but have extended beyond this to give the blind recipient approximately 10% increase in real purchasing power over 1945. Reflecting the variation of fiscal capacity of the states, average payments ranged from \$26 per month in the State of Alabama in March, 1954, to \$85 in the State of California. For all the states combined, aid to the blind payments average about \$5 more monthly than old age assistance payments. The difference in payment levels between these two groups reflects the additional consideration given blind persons both in terms of meeting special personal requirements and in terms of the fact that recipients of aid to the blind have less income on the average than recipients of old age assistance.

As a special incentive to blind persons to work and earn as much as they can, the Congress of the United States amended the Social Security Act so that income from earnings up to \$50 per month is disregarded when determining the amount of aid to the blind which is to be granted. This provision has been in full effect since July 1, 1952, and up to this time there has been no substantial indication that this provision has had any appreciable effect on the assistance rolls. Actually, it is probable that very few blind persons have earnings of any substantial amount. A study of blind recipients in September, 1950, showed only about 6 percent with any earnings. These were usually of small amount and did not effect eligibility for assistance.

I point to the enactment of this amendment as an indication of the fact that we do not look upon the aid of the blind program or the public assistance programs for other classes of persons as being a static system. The public assistance programs in the United States are now and will continue to be characterized by change and development. It is the nature of public assistance to expand as the need increases and to contract as need decreases. As Captain Robinson points out so well, "in a changing society economic security must be thought of as a movable rather than a fixed conception." In the United States public assistance, including aid to the blind, has a very specific role in the developing, though still immature social security system. The need for public assistance and the character of this service will inevitably change as social insurance, programs for medical care, provisions for various kinds of institutional care and rehabilitation services are initiated, developed and expanded.

Since this paper was written, the Congress of the United

States has passed amendments to the Social Insurance Program which provide for the "freezing" of wage credits for workers who become permanently and totally disabled, thereby protecting them against loss or reduction of the amount of their retirement benefits. The next logical step would be, of course, to provide insurance benefits to the disabled worker immediately upon the determination of his disability rather than to wait until he reaches retirement age. The Congress has also just passed legislation which will provide a great impetus to the development and extension of rehabilitation and training facilities through grants to the states. The means and the methods by which economic security for handicapped persons is provided are indeed diversified, and it is our obligation to be eternally vigilant in all fields of social action to assure that the economic, and indeed the whole range of social needs of blind people, are met with an increasing standard of adequacy based upon valid needs rather than on arbitrary compensation for physical loss.

Discussant: Dr. Herman H. Roose, Psychologist, Stichting "Het Nederlandse Blindenwezen," Amsterdam, Netherlands

In order to obtain data for this discussion I held an inquiry among a hundred blind people in Holland. I had chosen people of both sexes of varying ages and social and economic status. My questions were: What extra expenses do you have because of your blindness and what extra expenses would you like to incur if you had the money to do so? I obtained 43 replies. Before I tell you something more about the information I gathered, I want to quote one answer.

A man with a college degree wrote to me: "First I want to remark that life, because of blindness, has become not more expensive but cheaper. My income has decreased substantially since I became blind. So I had to economize greatly in order to match the cost of living with the degree of income."

Here I think we hit upon some of the most essential problems. First there is the aspect of rehabilitation. I know we are not supposed to speak about rehabilitation in this session, but still none of us seems to be able to avoid it. And indeed, rehabilitation is so closely linked with blind assistance that it would be an evident omission not to mention it. With Captain Robinson and Mr. Wood, we see that rehabilitation is not only providing a job or means of living, but also regarding the blind individual as a whole man. Therefore this bitter remark, "life has become cheaper," has a deep sense and is a warning and reminder to us. Not only in rehabilitation, but also in assistance, we must consider the personal needs. But here I want to point out that this does not necessarily mean that a man who has not is in need and he who has is not.

With the seeing there is very often some congruity between income and the social and economic way of living. Discrepancies may be leveled out by personal effort. This is not true for the blind. Our man with a college degree has fallen back, though his income may still be enviable to others. And he had not yet spoken of the extra costs of living, but only compared his present situation with former days.

I appreciate Mr. Woods' argument that the limited financial resources available for aid to the blind should be channeled to those who are most in need. This, in my opinion, must be the first objective of blind assistance. And it may be that for a long time this will be the only assistance many countries can give. However, there are and will be countries which have adequate provisions for all needy people. Of the measures involved we are especially interested in those for the disabled. If an accepted standard of maintenance is guaranteed for the whole group, our attention should be directed toward the less obvious but nevertheless hampering limitations that many blind people suffer who are seemingly better off.

Apart from the reduction or loss of income the blind have very little chance of promotion, usually none at all. Think of this not only in terms of economic value, but also of social and psychological effects. As to the extra costs of living, the inquiry I held can give us some information. But you are requested to note that its statistical value is very little because of the number of blind who were questioned and the very limited geographical area. I will list in the order of frequency the items that were mentioned:

Buses, trams, taxis (please bear in mind that most Dutch people cycle so that their transportation is very cheap), guide dog, typewriter, braillewriter, clothes (more wear and stains), telephone, braille books, sewing and mending assistance, tape recorder, gifts to assistants in general, radio, domestic help, braille watch, guide, secretarial service, household repairs, entertainment, hobbies, readers, periodicals, laundry, shoes (more wear), lessons, gadgets, tandem bicycle, membership in League of the Blind, train fare for guide (a guide is free in domestic public transportation), braille shorthand machine, holiday expenses, better class shops and stores for reliability, white cane.

This list may not be complete. On the other hand, there may be items that the seeing have on their budgets, too, or something similar, such as books, periodicals, pets, radio, typewriter, etc.

Then there are certain things that are cheaper for the blind, either because they can't make use of them or the real costs are lower. For instance, sports, cinemas, free fare for guides (which for married couples may be a real advantage), braille mail, certain types of tax exemptions. But even then the above list is most im-

pressive and adds up to an extra cost of living somewhere between one hundred and two thousand guilders a year, roughly \$50 to \$1,000, or 10,000 to 200,000 French francs.

Blind assistance of the first type, with means test, should include what might be called a rehabilitation test. We must be certain that all possible rehabilitation services have been rendered and accepted. Here we may encounter the case of the blind man who cannot accept it. The very estimable words of the Technical Working Group of the United Nations, quoted by Captain Robinson, may fail to the extent that the handicapped person cannot take "the responsibility in his turn to contribute to the economic welfare of the community" and that he has no "deep longing to achieve independence in a normal community instead of being segregated and kept in an environment of disability." Though blind, this attitude may be his real handicap. Especially in such cases blind assistance and rehabilitation should establish the closest co-operation. In these instances a grant without a means test will be a real asset to the program.

Regarding the influence upon public opinion and government measures, I won't add much. Only one thing—I'd like to make a comparison. I come from a country without any form of blind assistance. When addressing the big two—population and government—I would bring in the argument of a schoolboy who wants something new. He'll run to his parents saying, "Mammy, daddy, I must have a 'space suit.' All the kids in school have one. Really I can't do without anymore. They all laugh at me."

And then you may see that he who is late in getting his objectives will have the advantage of the newest and latest creations.

RESOLUTION X

The World Assembly of the World Council for the Welfare of the Blind resolves that special economic provision should be made for all blind persons, while insuring that the incentive to work and to contribute in other ways to the economic and social life of the community is in no way impaired. Each nation should therefore provide its blind citizens with a reasonable level of subsistence in accordance with the standards of living in the community. Such provision should take into account the fact that all blind persons, by reason of their blindness, have needs which are additional to those of a seeing person. Such special provision for the blind may be embodied in a general program of social security, or may be expressly made for the blind.

The Assembly endorses the provisions made by Sweden, Denmark and Australia, which countries grant an amount to the blind free of means test in recognition of the extra and unavoidable expense of living on account of blindness, such grants being paid

over and above basic maintenance allowances. The Council recommends similar legislation by all governments whose economies can justify this commendable provision.

TENTH SESSION Wednesday Morning, August 11, 1954
NEW HORIZONS FOR THE
MULTIPLY-DISABLED BLIND

Chairman: Donatien Lelievre, Director, Institution Regionale des Sourds-Muets et Jeunes Aveugles, Bordeaux, France

OPPORTUNITIES FOR THE
ADDITIONALLY HANDICAPPED BLIND

J. C. Colligan, Secretary-General The Royal National Institute for the Blind, London, England

Whatever disagreements there may have been between delegates arising out of questions which have been considered by this Conference during the last few days, there is at the outset of this Session, I am sure, one point upon which we can record complete agreement, and that is that the subject of our meeting today is both complex and difficult and that even the best informed of us are conscious of a general lack of information as to how to deal with this important problem. I think too that most of us will agree that it is a problem which sub-divides itself to such an extent that practically every case is one which requires individual and perhaps different treatment.

I am well aware that normally it is definitely established that an assembly of this character does not discuss problems connected with the education of the blind; those matters are quite properly left to the International Conference of Educators. But here I think we are faced with a problem which runs through the whole of blind welfare and I must, therefore, beg leave to enter to some extent the educational field in order to try and present as complete a picture as possible both of the problem itself and those things which we have tried to do in my own country to make a positive contribution towards its solution.

I would like if I may to try and deal with the matter under the headings of: the education, training and employment of additionally-handicapped children; then the rehabilitation, training and employment of additionally-handicapped blind adults with special reference to the exceptional categories of the deaf-blind; and the multiply-injured war blinded.

I would suggest to the Conference that any approach to the problem should be on the lines that the community has a special responsibility to the multiply-handicapped, for many of them have acquired their additional handicaps through the progress of medical knowledge. We need only think in terms of the use of sulphadiazine, advances in new fields of surgery, the problems of tubercular meningitis, to realise that today science is saving at the cost of some permanent gross disability many people who formerly would not have survived. The community, therefore, has a two-

fold responsibility: to give and to gain. It must give to the additionally handicapped an occupation of hand and mind which will restore the self-respect of the individual. If it does so it will stand to gain from the productive capacity of the individual in respect of his own self-support. It is surely far better to secure under these conditions a worker who is capable of making a 10% contribution to the normal progress of society rather than to have him or her living a restricted existence of frustration and despair and of being a permanent liability upon his fellow men and women.

To turn now to an outline of our efforts in Britain to combat this problem. I would like to speak first of all of the establishment by the Royal National Institute for the Blind in 1947 of a separate educational establishment for blind children with additional mental or physical defects. For many years previously we had made some attempt to deal with the problem but eventually it was borne upon us that the small school of this character which we had in the Southwest of England was only drawing children from a limited area of the country. We therefore made a special effort to find out from all our Local Education Authorities what children they had who were receiving no education because they suffered from an additional disability to their blindness. The results surprised us, and were such that we had no hesitation in justifying our decision to open Condover Hall in the Midlands of England which has since 1947 been providing residential education for 75-80 multiply-handicapped children. The objects of Condover are two-fold: firstly, what contribution we can make for the benefit of the child, and secondly, what contribution can be made for the benefit of the child's family. We believe that at Condover Hall we can, by the time the child reaches the age of 16, achieve one of five results: firstly and ideally, that the child can have entered the normal stream of blind education; secondly, that he may have become the type of youth who is capable of some form of occupation; thirdly, we may have been able to ensure that the child has become a positive help at home rather than a burden upon his family; fourthly, we may only have been able to ensure that the child has achieved a measure of self-help; and lastly, we may have failed completely. In this connection we have, over the past 6 years, secured a return of additionally handicapped children to normal school life at the rate of 2 per year; not perhaps a dramatic result but one which is gratifying when taken in relation to the partial successes which we have achieved under the other headings.

Now to say something of the types of disability to which we cater. The children in our School range from those of a high intelligence plus a gross physical handicap to those who are educationally sub-normal bordering upon ineducability. The headings under which types of disability can be divided are broadly six, but

it must be borne in mind that many children fall into more than one of the six categories. These are:

1. Educational sub-normality—which group can be said more or less to cover 90% of the children in the School.
2. Cerebral Palsy.
3. Epilepsy, other than gross epileptics.
4. Orthopedic defects—which includes the victims of poliomyelitis or tubercular joints.
5. Emotional Maladjustment.
6. Deaf-Blind.

General lines of education are: firstly, rehabilitation; secondly, practical work including activity outside the classroom; and thirdly, social education, by which I mean the fostering of the community spirit and a special relationship between the staff and the children which has enabled us to divide the children into six families each in charge of and named after a mother. The mothers are responsible for the clothing, cleanliness, and general welfare of their group of children and all members of the staff who have direct dealings with the children—housekeeper, nurses, sewing matron, school secretary as well as the teachers—are each allocated to a family.

Now what are the prospects for additionally-handicapped children who have received a few years of such education? The first is placement in normal industry, bearing in mind that there is and always must be a distinction between educational sub-normality and normality. Already we have been successful in placing a number of our school leavers in such rather ordinary occupations as canteen assistants, gardeners' laborers, and nursery or domestic workers. The second prospect is that of employment in a sheltered workshop or some home-working scheme but here one must be assured that the authorities in charge of the administration of the workshop must be prepared to operate a department which contains some more highly sheltered workers than usual. Thirdly, there is placement in a residential centre for the Blind which caters more for occupational work than for productive capacity. At the Royal School for the Blind at Leatherhead we have an outstanding example of how this section has been integrated with normal blind trainees. Lastly, there is the prospect of some employment from the school leaver's own home at a day occupational centre.

But what of the person whom we have not been able to pick up in the educational stream or who has acquired his additional handicap in later life? Here I would say that a proper course of rehabilitation at a Centre of Rehabilitation for the Blind is essential and to this must be coupled the will to succeed. Since the war we have in Britain operated rehabilitation centres for the newly-

blinded which are aimed at the restoration of the confidence and competence of blind people as quickly as possible after the onset of blindness.

We are firmly convinced that expert training is most effective when it is given in a residential establishment set up solely for that purpose for, if the blind person remains in his family circle, there is so often a natural tendency on the part of his relatives to want to do things for him and so his chance of regaining independence is thus diminished. The first step towards adjustment to the new conditions which blindness imposes is the performance of the common tasks of daily life, such as walking, dealing with food, shaving, lighting a cigarette. Braille is taught to most of the residents as is typewriting. Everyone learns some form of handicraft, to the therapeutic value of which great importance is attached. A newly-blinded person is shown that it is within his power to make useful and beautiful things. They not only provide a source of enjoyment to the individual but they are a valuable guide in the selection of a suitable future training. Basketry, chair-caning, rush seating, weaving, leather-work, woodwork and pottery are all amongst the crafts practiced, and there is also an assembly shop where men and women who are picked out as being suitable for further industrial rehabilitation can develop manual dexterity and an accurate sense of touch. Because we believe that the force of example is so much more potent than anything else, the Warden and indeed most of the teachers in our rehabilitation centres are themselves blind. They are a living proof of what can be done by determined effort and so are the best example to the newly blind.

In these centres we have had a number of blind people with additional handicaps and if I may give two simple illustrations I would mention the case of a miner who was not only blinded but who suffered the loss of a hand in a pit explosion. He was provided with an artificial hand and during the course of his general rehabilitation he was gradually guided towards specialist training as a telephone switchboard operator, though he might in certain circumstances equally well have become a shorthand-typist.

Another interesting case is that of a man who in 1946 was tossed by a bull and received severe injuries to his spine. He was only able to walk with the aid of two sticks. Four years later he contracted glaucoma of both eyes and was registered as a blind person. Shortly after his blindness he was admitted to our rehabilitation centre and though, owing to his spinal injuries, he required help with dressing and undressing and could only walk for moderate distances, his course of rehabilitation not only benefited him in health and outlook but opened to him for the first time the prospect of employment as a disabled person. Except for the fact

that he needs a constant escort—if he should fall or be knocked over the consequence to his spine might be very serious indeed—he is now back in his own home town working for the last 3 years in ordinary industry as a fly press operator.

I said earlier that with rehabilitation must be coupled the will to succeed, and a striking example of that has recently come to my notice. A young man who was perfectly adjusted to his blindness and who was working as a senior shorthand-typist in a Government office was struck down by poliomyelitis which left him virtually paralysed from the waist downwards. So well was he adjusted to his blindness and such was the streak of determination in his character that, despite this grave additional handicap, he has forced himself to continue with his present occupation because he instinctively realized that the determination which he had applied to overcome the handicap of blindness could be turned to equal account in meeting this further, and to some almost overwhelming, additional handicap.

Rehabilitation too is an essential requirement in respect of the training and ultimate placement of deaf-blind persons. I am sometimes rather amazed when I hear that there is a relative absence of deaf-blind people in a particular country. Deafness is a handicap which equally strikes at all members of the community, irrespective of whether they are blind or sighted, and I would have thought that the proportion of deaf people amongst the blind is at least as great as the proportion of deaf people against the sighted. In Great Britain, with a blind population of approximately 100,000, we now have records of some 3,000 people who are victims of the dual handicap. These figures were only reached as a result of a survey which was carried out in 1939 in order to ascertain the extent of the existence of deaf-blind persons in England. This investigation revealed that there were frequently deaf-blind people in mental hospitals and institutions who were not there because they were insane and who were not insane at the time of their admission; they were merely there because authorities had not understood the problem of their handicap. Therefore, I would say that the first essential in dealing with the deaf-blind is to seek them out. When this is done it must be recognized that there is frequently among the deaf-blind some residual remnant of either sight or hearing.

To ensure the employment of deaf-blind persons three things are necessary: Firstly, that whatever residual sight or hearing remains should be fully developed; secondly, that an adequate method of communication with the outside world is assured (this may be through one of the normally accepted manual alphabets, through the use of some simple communicating device, or, wherever possible, in teaching a deaf-blind person with speech to re-

ceive communication from the sighted merely by allowing the message to be printed in capital letters on the palm of his hand); thirdly, there must be good-will on the part of some employer who is already convinced from experience of the capabilities as productive workers of normal blind persons. By this means one could frequently place deaf-blind persons in employment in ordinary industry. We have placed several such in industry as machine operators, and even as inspectors using precision instruments. The alternative may be that of sheltered employment, and finally there is, for those who are totally deprived of sight and hearing or who have not the necessary aptitude for employment, the residential centre for the deaf-blind where residents are encouraged to engage in the handcraft rooms where, in addition to providing them with a pastime occupation, they gain in self-respect and in their pocket from the results of sales of work of the articles which they have produced.

Now, lastly, I come to the problem of the war-blinded—those who have simultaneously suffered a double injury of blindness and physical mutilation. Here it is difficult to think other than in the terms of the individual case but, broadly speaking, the principles upon which our friends at St. Dunstan's have endeavored to work are to secure for such people as great a measure of independence as possible in their homes and in their work. Naturally the categories of the war-mutilee are many and varied but by far the most serious deprivation in addition to blindness is the loss of hands or arms. Almost invariably it is found that a double amputee has to work in conjunction with a second person, but that a single amputee may engage in a considerable variety of work which includes telephone switchboard operating, lift attendant, carpenter, weaver, vending stand operator, travel agent, appeals organizer, and guide lecturer. In the industrial field many have been placed on capstan lathe work, drilling operations, inspection work to set gauges, or on some form of simple repetitive operation. For the blind paralysed or blind arthritic there is necessarily a much more limited field unless the victim is of the higher intellect group in which case he may be able to engage on some journalistic or writing occupation.

I spoke earlier of the endeavor to secure as great a measure of independence as possible both at home and at work for such people. In the industrial field most of this has been done by the adaptation of certain machines for foot operation by the amputee which, combined with a variety of artificial aids related to a specially adapted machine, may take the place of hand or arm. The special aids which have been devised to enable such people to secure independence in the home have included repeater watches, special typewriters, feeding appliances, the fitting of door handles

operated by a lever rather than a knob, and in the field of personal hygiene the fitting of special water taps, nail brushes fixed to the wash basins with suckers, loofahs and sponges which can be drawn over the stump like a glove; the provision of shoes with elastic shoelaces, and of shirts which are fastened by means of a zip-fastener at the top of which the necktie is already attached. There is even a box which contains 25 cigarettes and where by pressing a knob a blind handless man may withdraw his cigarettes already lighted.

I have endeavored during the last few minutes to outline what we in Britain are trying to do for the doubly-handicapped blind person. It would be foolish to pretend that we have got a complete answer to the problem or that we are even satisfied with the extent of our present progress. Much has been attempted—so much more remains to be accomplished. If what I have said helps to stimulate a discussion of the question then my colleagues and I will hope to learn much from the ensuing speakers.

The keynote of all the work of our Conference to date has been that of Twentieth Century Horizons; no one will pretend that the horizons for the additionally-handicapped blind are very broad, but if we can as a result of our talk today allow some of the first faint glow of light to suffuse them, then I think we shall not have spent our time in vain.

Discussant: Mitat Enc, Director, Department of Special Education, Gazi Teacher Training Institute, Ankara, Turkey

After I had agreed to accept the honor of participating in this discussion I was a little uncertain as to how I could contribute towards widening the horizons for the multiply-handicapped blind. As the representative of a country which only five years ago began to include special education as a part of the public school system, I have had very little personal or local experience concerning problems of the additionally handicapped on which to report. However, I have decided to base my talk mainly on a review of the scanty existing literature on the subject. I shall also report on our attempts to develop a workable and useful program to meet the needs of a small group of slow learners and mentally-retarded blind children in the Ankara School for the Blind. Because I did not have the pleasure and benefit of studying his paper at the time I prepared mine, I hope I will not be repeating the points developed by the honorable main speaker of our panel. If you have to listen to the same ideas twice, please put the blame on international postal services.

One of the outstanding characteristics of modern industrial development is the fast-growing efficiency in reducing wastage of raw materials used. Every day we read of new methods and tech-

niques of producing goods manufactured from materials which were once considered useless. The field of organized education is also going through the same process, though at a much slower pace. As we all know, the earliest schools and educational programs were designed to meet the needs of the small privileged classes. Later when the subject of mass education was considered the educators and thinkers of the time appear to have committed the major error of using the same school organization and curriculum as was originally conceived to fit the high academic abilities of the privileged classes, merely by increasing the number of schools and teachers. For a long time average and below-average children suffered failure and frustration in rigidly set programs in which they were merely considered the natural and inevitable wastage of the production system. It took us a very long time to realize that a system of production which wasted most of the raw material could not be a good system, and that we had to alter the standards of attainment to fit the needs of the normal children who made up the majority of the students.

The second stage of human wastage lasted until the educators became aware of individual differences and began to try to improve the educational system to fit the vital needs of individuals and groups. So began the development of Special Education with its special schools, classes, programs, methods and materials.

Present literature indicates that in the evolution of the educational system we are now going through the third stage of attempting to devise ways to utilize the energies and talents of multiply-handicapped people. We seem to have spent the first half of the present century in debating where to put the responsibility for training multiply-handicapped blind children—the deaf-blind, mentally-retarded blind, crippled-blind, etc. There were differences of opinion as to which of the handicaps was major and which was minor. Consequently the schools for the blind attempted to place the responsibility on agencies for other groups of handicapped and vice versa.

In countries where the agencies and authorities for each handicapped group are well developed there still appears to be a gap between the areas of the various agencies which serves as the pitfall for the doubly handicapped. In most cases neither of the two agencies concerned seems willing to assume the responsibility. Perhaps this is not entirely the fault of the agencies, as most of the existing legislation does not define the responsible authority for the education of the multiply handicapped. A second reason is that the trained staff for each area has gone only into its own very narrow field and does not feel adequately equipped to deal with the more complicated problems of the multiply handicapped.

The multiply-handicapped blind person who is placed in a

school should not always be considered fortunate because he usually finds himself in a situation which does not offer a solution to his most vital problems of education and adjustment. The school in which he is enrolled most likely has facilities to meet only one of his handicaps. Consequently his particular and more complicated situation does not usually receive the special attention required. The school only tries to fit him into a place in its program without the required adjustments, and expects him to benefit from what he is offered. It often leads to an attempt to teach him habits and skills which are of doubtful value to his satisfactory and successful adjustment, such as teaching a deaf-blind child or forcing a mentally-retarded blind child to acquire certain academic skills which will have no practical effect on his life adjustment. Often such achievements are only admirable demonstrations of human perseverance and endurance.

They remind me of the story of the Sultan and the Tailor. The tailor had acquired the skill after years of practice of threading his needle by throwing the thread from a distance into the needle's eye. He went to demonstrate his skill to the Sultan, hoping to receive a reward for his achievement. After watching him the Sultan ordered that he receive a payment of twenty gold pieces and twenty days imprisonment. The bewildered tailor dared to ask, "Your Majesty, I understand the twenty gold pieces, but why the twenty days in prison?" The Sultan answered him. "Yours is a wonderful but a useless skill. You could have spent all that time and energy to become a better tailor. So the gold pieces are for your perseverance and the twenty days your punishment for wasting your time and energy on a trifle."

The nature of any adequate program is determined by two principle factors—a) the number of persons for which the program should be designed, and b) the developmental characteristics and needs of the particular group.

With relation to these two factors it is apparent that we know very little about the multiply-handicapped blind. Some studies indicate that between fifteen and twenty percent of the population of schools for the blind are multiply handicapped. Almost no data is available about the number of multiply-handicapped blind in other institutions and those who remain at home. Ways must be devised to determine the number of multiply handicapped as accurately as is possible for those with a single disability. We are also in need of systematic and scientific studies to determine the developmental nature and characteristics of the multiply-handicapped blind. Such cases do not present simply a mere multiplication of handicaps. Crippling or mental retardation along with blindness will certainly create a more complicated and difficult pattern of growth in physical, mental and social development. If

we add to these the individual's pre-school experience and environmental treatment, a picture will arise which will be very different in its educational, social and vocational needs. So the treatment of the individual merely as a blind and crippled or blind and mentally retarded person will not solve his problems.

There is some agreement on the point that the percentage of multiply-handicapped blind in schools for the blind is increasing due to the elimination of some of the preventable pure blindness cases. With the statistical and case study data accumulated during the last fifty years in schools and other agencies for the blind, we can more specifically determine the amount of increase. If the increase is statistically significant, then the schools and agencies must adjust their programs and activities to fit the needs of this group. To do this efficiently we must study the type and needs of each prevalent group of combined handicaps. Present literature mainly emphasizes the following.

Deaf-blind—Though numerically not as significant as some of the other groups, most existing literature deals with the problems of the deaf-blind, which is an indication that most countries are more aware of the deaf-blind and provide more facilities for educating them.

This hopeful situation may be partly due to the fact that schools for the blind have assumed early responsibility and showed willingness to train the deaf-blind, and partly to the magnitude and effect of the personality of Miss Helen Keller in arousing public interest in the group. Present literature indicates that most of the educational problems of the deaf-blind have found some sort of solution. However, very limited systematic attempts have been made to study how and at which occupations they can vocationally be made useful and productive.

Slow-learning and mentally-retarded blind—The problems of this group, which may be the most significant one numerically, are treated superficially in most existing texts and publications. The older literature warns educators of the blind of the difficulties and complications which this group may cause in the schools. I remember an educator of the blind who recommended to me that I try to screen the mentally-retarded blind out of the first schools for the blind in my country. He was no doubt right as far as my country is concerned with its limited and developing facilities to this group. Nevertheless, their acceptance into the schools will not solve the problems, because most of the schools are not sufficiently prepared to answer the needs of the slow-learning and mentally-retarded blind. In order to solve adequately this problem schools for the blind need adjustments in the following directions.

1. To develop existing methods of psychological testing of the blind to enable the school to diagnose the degree of retardation more efficiently. Lack of psychiatric research on the effect of blindness and social restrictions and overprotection on the development of blind children often leads us into errors in determining which cases of retardation are merely functional and which are constitutional. Functional cases naturally require different methods of treatment than constitutional cases. The first group mainly require the elimination of emotional blocks through psychiatric and educational processes. On the other hand, constitutional cases call for the adjustment and revision of programs and methods of training.
2. Schools for the blind must have teachers who have had training and possess an understanding of the characteristics and educational needs of blind children whose conditions are complicated by additional handicaps. Considering this fact to be very vital, the Special Education Department of the Gazi Teacher Training College in Ankara, when organizing its program of training teachers of the exceptional child three years ago, decided to make a basic course in each area of the handicapped compulsory for all students. Thus future teachers of the blind, deaf, emotionally maladjusted, etc., each receive required basic training in the problems of the mentally retarded, crippled, gifted, etc. Only in the later stages of their training do they concentrate on their major areas.
3. Another very important point to be considered is the need to change the attitudes of the schools and teachers towards the mentally retarded so that they will not be resented and will have the best opportunity to develop a healthy and well-adjusted personality. To reach this goal the following practical means may be suggested which are at present being tried at the Ankara School for the Blind with thirteen slow or retarded blind pupils between the ages of seven and sixteen.
 - a. The retarded blind child should be placed with his chronological age group.
 - b. Diagnosis should be made of his experiences and achievements and an individual program planned, based on his level of attainment and taking into consideration his rate of learning. This individual program should consist of a series of practical work units covering the areas of health, homemaking, food, shelter, living together, etc., and other specific topics which will help him to understand some of the basic facts of the society in which he

lives and also develop the necessary skills, habits and attitudes which are vital to his adjustment.

- c. A homeroom should be provided for the group with a specially-trained teacher to which the retarded children report according to their individual schedules to receive necessary additional help, such as for reading, writing and arithmetic. The teacher will co-ordinate the retarded child's work unit to the program of the age group he is in. Through this co-ordination he will be able to participate and co-operate with the main group in the activities to which he is able to contribute. His work project can very easily be tied in with such activities of the main group as games, plays, physical education, modeling, music, excursions, discussions, etc.
- d. The acquisition of manual skills should be emphasized in the program of the mentally retarded, as in this area they are closer to the normal than in academic aptitudes. In our school seventy-five percent of our children are from small village communities, and we expect that a considerable number of our retarded children can be returned to their rural communities where the family ties are very strong. If we are successful in teaching them certain skills which will be needed in their home life they can become helpful and useful members of their communities. A slow-learning child who can milk a goat, take care of a small poultry unit, weave simple saddle girdles or make simple baskets out of willow twigs to be used for packing of fruits, vegetables and eggs can become an indispensable member of the family, and even to a degree support himself for a simple life in a village community. During the process of learning such skills the individual also gains a sense of accomplishment, security and self-confidence which are the essentials of a healthy and well-adjusted personality.
- e. Schools and placement agencies should carefully study the vocational opportunities for this group. At present the prevailing assumption is that there is almost no hope for the members of this group to make themselves vocationally useful and self-supporting. As a matter of fact, in a highly competitive society where even normal and talented people encounter great difficulties in securing jobs, the retarded blind cannot hope to stand on their own feet. However, in the highly-mechanized countries the processes of production are often broken up into small and simple operations, the performance of which may not require much talent or intelligence. Processes which

do not involve the operation of complicated machinery would be particularly suitable for these people. As Dr. Christine Ingram of the Illinois (USA) State Normal University brings out in her book on the education of the slow-learning child, "... these simple and monotonous processes are better fitted to the disposition and psychology of slow children than they are for the normal intelligence." This is because slow people are not bored by the monotony of the process. Unless this area is studied carefully and necessary effort spent to place the mentally-retarded blind in simple jobs, our education attempts will be merely a waste of time. In order to find a solution to this vital problem the combined efforts of the schools and agencies for the blind and mentally retarded must be enlisted. Workshops and meetings similar to the Regional Conference on the Mentally Retarded Blind Child held at the Iowa (USA) Braille and Sight-Saving School in April, 1952, in co-operation with the American Foundation for the Blind will be very helpful in defining goals and methods.

Cerebral-Palsied Blind—One of the multiple handicaps of which we have become aware during the last twenty to twenty-five years is the cerebral-palsied blind. A study conducted by Miss Eleanor H. Long and published by the American Foundation for the Blind clearly indicates that it is a more complicated problem than most other combined handicaps. In most cases the affliction is triple or even quadruple. In our schools in Ankara we have two such cases. In one case the condition is so bad that it leads one to believe that nature must have been performing a cruel experiment to determine the barest minimum at which a human being could survive. In addition to his total blindness, his IQ is about 75, his left arm is paralyzed, he suffers from epileptic fits and on top of everything else, he has a slight heart condition. Such cases require the close co-operation of the schools and agencies for the blind and for the cerebral palsied for diagnosis, treatment, education and rehabilitation as recommended in the report of the Cerebral-Palsied Blind Child by Eleanor H. Long.

Other Combined Handicaps—We know very little about the statistical significance of such combinations as the epileptic-blind and the crippled-blind. On the problems of the crippled-blind and the measures taken for their education, you will hear an inspiring talk by our colleague from Yugoslavia. His paper and all other publications indicate very clearly the high individual nature of all multiply handicapped cases. Being a deaf-blind or retarded-blind child does not put the individual into a clearcut category for which we may prescribe a definite and specific program. Each case

is highly individualized by additional physical, psychological, and social and economic factors which must obviously be taken into consideration in his education and life adjustment.

Another conclusion we are able to draw at the present time is that we must intelligently determine and place the responsibility of the training of the handicapped with the schools and agencies to which it belongs. If blindness is considered the major affliction and if the schools for the blind are in the best position to assume the responsibility, without losing further time they must prepare to accept and train every type of combination of handicaps with blindness and play the role of leader in devising solutions to their problems. If we had started to accept and work with the mentally-retarded blind at the same time and as systematically as we did with the deaf-blind, the problem by now would look very different. Let us hope that this Conference will be a turning point in their favor.

Discussant: Stevan Uzelac, President, Association of the Blind, Belgrade, Yugoslavia

It is known that in the development of human society and because of the complex nature of that development, enormous difficulties exist and will continue to exist as obstacles on the road to complete economic and cultural advancement, which is the desire of every progressive person. Through this natural process of the development of society the blind, in contrast to all other handicapped persons, have the most difficult time, regardless of where they live.

The difficulties are felt much more by the multiply-handicapped blind because of the question of their education, re-education and rehabilitation is of paramount importance and very complicated. Consequently it requires not only more material expenditures but also huge efforts by social, educational and health workers engaged in this field of work. For these reasons, it is more difficult to reach a solution to these problems. Until recently in some countries the rehabilitation of these persons was completely neglected. Many educators considered that the blind with multiple handicaps were totally incapable of learning and that their place was only in asylums. However, in the countries which have been tackling this problem, very good results have been attained which not only offer valuable experience but also indicate the existence of great possibilities for the rehabilitation of the blind with multiple handicaps.

The problem of education and rehabilitation of the multiply-handicapped blind is also one of the vital questions in the program of the general welfare of the blind in Yugoslavia. This problem was very sharply indicated in our country after World War II, for

during and immediately after the war a considerable number of children and youth lost their sight and suffered serious hand or leg wounds from explosions of bombs, grenades and mines which were laid by the occupation forces in the fields and forests of our country. Efforts were made to help these children and youth and offer them opportunities to become useful members of society. As we have no special institutions and schools for blind children and youth with multiple handicaps, they had to be placed in institutes and schools for the blind. To illustrate this point we mention the fact that about 20 to 25 per cent of the enrollments of such institutions are multiply handicapped. Nearly all these institutions for the blind are showing fairly good results in educating and rehabilitating handicapped blind children and youth. Special mention should be made of the Institute for Blind Youth in Ljubljana where there are, among the other blind, sixteen blind pupils with only one hand and two with no hands.

Regardless of whether a pupil has only one hand or no hands he must do all kinds of work in the institute or school, provided the work does not require the use of fingers. He can arrange cubes or boards, make sticks, count chestnuts or other nuts, work with Dr. Montessori's equipment, arrange nails, count on the abacus, work on a sand table, model, fold paper, play with toys, eat with a spoon, do gymnastics and many other things, just like his fellows with healthy hands.

When doing the above mentioned tasks the blind student with one hand works intensively with the healthy hand, whether right or left, without neglecting the impaired limb which must co-operate with the healthy hand. The handless pupil carefully and patiently works with his below-the-elbow stump. While working, the pupils with one hand or those without hands use the impaired limb, which is very necessary for health reasons. The impaired limb will remain relatively healthy and mobile only if the blood circulates through it constantly, which can be maintained only by the constant use of the limb.

However, there are jobs which the handless pupils cannot do. For instance, they cannot tack a nail with a hammer, they cannot sew, tie a shoestring, knit, etc. A handless pupil is not required to do everything. If he were to find out too early that he cannot do everything that his comrades do, he would become discouraged at the very beginning of his education, and this would be harmful to the entire education of such pupils.

Blind pupils with one hand read and write braille with that hand, either the right or the left. The impaired limb always co-operates by helping the healthy hand in placing the

paper for writing, locating the new line, helping to turn the pages, etc. The impaired limb never rests. It works whenever possible and in the manner in which it is possible. After persistent and intensive work, the blind pupil with one hand can read and write braille, Klein and Hebold. The blind pupils with one hand can also learn to type. If they are not totally blind they can learn to write a graph letter. Handless pupils also learn to read and write embossed print for the blind. Of course this requires more effort than for their blind comrades who have one hand. If a handless pupil has at least two-thirds of his arm below the elbow, a surgeon can perform a Krukenberg plastic operation and thus condition the stump to grasp and hold different objects including a stylus. Dr. Bogdan Brecelj has successfully operated on the right limb of a pupil in the Ljubljana Institute. In the operation Dr. Brecelj separated the radius and the ulna. The patient can now firmly hold a stylus and write just like his comrades who have two healthy hands. This pupil was given a special prosthesis with a mounted stylus, constructed by Joze Karic, a defectologist. The prosthesis is light, simple and very practical, and the pupil can easily remove and replace it himself. He can now write braille.

Handless pupils have also learned to read braille. At first, they learned to read with the help of the below-the-elbow stump. They learned to read certain letters and short syllables, but only those which stood separately. They were not able to read words and sentences. The below-the-elbow stump cannot register a strong sense of touch. The instructor in the Institute began drilling these pupils in reading with the help of the lower part of the lower lip. Excellent results were obtained so that now handless pupils can read braille.

The primary exercises in reading with the lower lip are very difficult and require much patience and perseverance. The pupil cannot read from a page in front of him on the table. These exercises require a special appliance, a roller on a stand. A sheet of paper with braille text is attached to the roller. The pupil feels the words and sentences with his lower lip and slowly turns the roller. In this way all the lines of the text come in the best contact with his lower lip and the pupil gradually passes from line to line. This roller is essential for the primary reading exercises of the handless blind pupils. After the pupil learns to read braille well, he can read directly from a book.

Blind pupils with one hand and handless pupils also attain very good results in handicrafts. Pupils with one hand knit bags of twine, while the handless blind pupils fold paper with their lips and impaired limbs. Both can model and play musical

instruments. They play the mouth organ and trumpet very well. These are the only instruments which are accessible to pupils with one hand, while the mouth organ is accessible to handless blind pupils. Our institutes have organized orchestras consisting of pupils both with healthy limbs and those with one hand or without hands. These orchestras are getting along very nicely and can play a number of national folk and artistic songs.

Work with these pupils is very strenuous and requires much patience and resourcefulness on the part of the teachers. But most of our instructors find great pleasure in this work, because the blind pupils with impaired upper limbs work diligently and attain good results both in school and after school hours.

After the end of the school term the question was raised as to how to further condition and prepare these pupils for the future. In the institutes they also have vocational guidance. A certain number of these pupils have completed the lower secondary school and telephone operators course and are now employed as telephone operators in government agencies. In fact experience has shown that the vocation of a telephone operator is the most suitable occupation for the blind person with one hand, and even for some handless blind persons. A one year course for blind telephone operators with one hand has been opened in Zagreb and the first group of twenty pupils has recently completed training.

In the experimental workshop of the Union of the Blind of Yugoslavia in Zemun, an attempt was made to train blind pupils with one hand to work on certain kinds of machines. This proved to be successful. A young man with only one hand can work on a revolver machine, Sik machine, Dicht machine and Bor machine. He can insert corks in stoppers of beer bottles, etc. We hope to be able to find new employment for such persons through further experiments.

In Yugoslavia we have had no special experience in work with other groups of blind persons with multiple handicaps and therefore cannot discuss them here. We have dwelt in detail only on the question of young boys and girls with additional handicaps for, as we have already said, their number is the largest and they have been our greatest problem. We hope that our experience described here will be useful to workers dealing with these problems in other countries.

Today when public opinion in all countries of the world is more and more coming to recognize the abilities of the blind, and when the World Council for the Welfare of the Blind is taking an ever more active part in the improvement of conditions

of the blind all over the world, we can freely say that much better opportunities are also being created for the blind with multiple handicaps. Therefore, these persons should be admitted at the earliest possible time to schools and institutes, and everything possible should be done for their education and rehabilitation so that they may become useful members of society.

DISCUSSION

In replying to a question MR. COLLIGAN (UNITED KINGDOM) stated that it would be impossible to give accurate figures on the number of employed multiply handicapped persons in the United Kingdom. MR. GETLIFF (UNITED KINGDOM) urged the training of the multiply handicapped blind with a view to their integration in normal society. CAPT. DESAI (INDIA) doubted the wisdom of concentrating on the rehabilitation of the multiply handicapped blind in underdeveloped areas where there were a great number of unemployed among the general blind population. SIR CLUTHA MACKENZIE supported the view that in the early stages of services for the blind, programs should concentrate on physically fit blind persons in order to demonstrate to the general public the abilities of the blind. SENOR PARDO OSPINA (COLOMBIA) stated that in his country much had been accomplished in the field of the training of the multiply handicapped blind, and said that they would be pleased to have foreign students observe this work. SIGNOR SASSO (ITALY) felt that the publication of a catalog of resources and methods of training the multiply handicapped blind would be most helpful. MR. WATERHOUSE (UNITED STATES) informed the Assembly that next term Perkins Institution would have more than fifty children with severe or minor disabilities.
(See Resolution XIII on page 254.)

ELEVENTH SESSION Wednesday Eve., August 11, 1954
20TH CENTURY PROGRESS IN MEETING THE
GENERAL WELFARE NEEDS OF THE BLIND

Chairman: Louis Renaux, Secretary General, Association Valentin
Haüy pour le Bien des Aveugles, Paris, France

I express my thanks to the members of the Program Committee who have done me the honor of appointing me Chairman of this session of the General Assembly during which the development of welfare of the blind in the Twentieth Century will be discussed.

Four speakers will set forth the accomplishments which have been attained in that field, the different points of view of each country regarding the welfare of those afflicted with blindness, and tell us of the importance of the tasks which are still before us, especially in the underdeveloped countries. Several of our colleagues have, in this Assembly, stressed the important contribution of technical progress to the improvement of the condition of the blind, socially as well as in the professional field. But it is obvious that to make these advances available to the blind the disparity between the cost of new appliances and the blind person's ability to pay must not be allowed to hinder their use. This is one of the main problems facing those devoted to the welfare of the blind in the Twentieth Century. Private organizations and governments must do their best to work towards its solution if they do not wish the condition of the blind to be worse than it was in the past century, especially in the professional field.

Another problem common to all delegates of this Assembly is the enactment of adequate legislation to meet the needs and legitimate aspirations of those afflicted with blindness. Co-operation between private organizations and governments is as necessary to the improvement of such legislation in countries where it already exists as to its creation in those countries where it is still lacking.

In their statements our colleagues will doubtless give us new points of view on the tasks to be accomplished. They will convince us without difficulty of the absolute necessity of united action to promote a welfare program which will daily become more efficient, which will give to the most handicapped person a decent standard of living, and to all those who are capable, occupations which will bring them independence.

There is still much to be done and it is my sincere hope that this Assembly will strengthen our conviction of the absolute necessity of united action to give the blind a better life.

CULTURAL, JURIDICAL AND SOCIAL CONQUESTS AND PERSPECTIVES FOR THE GENERAL WELFARE OF THE BLIND

**Prof. Paolo Bentivoglio, President, Unione Italiana Ciechi,
Rome, Italy**

I am grateful to the Program Committee for doing me the honor of inviting me to address the Conference on this aspect of service to the blind in the Twentieth Century. I feel obliged however to speak on the subject only in general terms as I am not a specialist except perhaps in the field of education, which subject is in the capable hands of Mr. Getliff. Having explained this I will at once proceed to review several of the services which are embodied in the title of my paper and their attendant problems.

I hope you will allow me to express the view that one of the objectives of the World Council for the Welfare of the Blind is to ensure the provision of adequate financial assistance. Such assistance, originally extended by philanthropic impulse, has become and will surely continue to be more widely recognized as a social right in more advanced countries. France, the country which founded the principle of creating special organizations for the blind, continues to make its contribution to the advancement of this particular ideology. But I am pleased to announce that an important development has now occurred in Italy. Our Parliament has approved a law which allows blind civilians a monthly pension of from ten to fourteen thousand liras. This alone will not ensure a reasonable level of subsistence, for it must be borne in mind that Italy at present faces grave economic difficulties. We may anticipate however that improved pensions will be provided as and when economic circumstances permit. I am convinced that pensions should be provided on a financial basis and not left to the whim of the general public. As was agreed at the 1949 Oxford Conference, all countries should provide pensions for their blind civilians. Even when the blind are able to work, either in open or sheltered employment earning normal salaries, they require special support because the extra costs which blindness imposes serve to reduce their general standard of living.

I will not analyze the research that has been undertaken or the achievements recorded in opening the professions to the blind. Every country has had its negative and positive experiences. But it is undeniable that certain progress has been realized in experimentation to locate new outlets and to increase the number of employed blind people. I will repeat here what I said at the Bussum International Conference of Educators of Blind Youth. In Italy we have more than one hundred blind teachers regularly employed in national schools for the sighted.

Some of our colleagues are interested in a law already approved by the Senate and now before the Chamber of Deputies which is designed to make blind teachers eligible for posts in public schools. Certainly blind people are able to teach such subjects as philosophy, history, political economy, law and music. In countries where pupils are required to take written examinations the blind teachers can be helped by sighted secretaries or assistants to ensure adequate supervision during written work.

The point is that we must try to overcome the violent prejudices of some countries and to obtain the revision of laws governing the employment of teachers. I know we cannot easily and speedily realize this purpose, but we must pursue it, particularly since it offers prospects of success that may be denied us in certain other areas of professional employment.

The provision of employment opportunities for the blind is our greatest single problem. We must therefore pay special regard to programs of professional and vocational training. Our primary schools are well equipped and boarding school life provides the best means of educating the young blind. Discussion took place during the Bussum Conference in an effort to determine the most suitable methods for training the young blind. On this occasion I believe we should examine the subject with as broad a viewpoint as possible. Our findings should not be based on the experiences of the best schools and colleges in the most advanced countries, but we should try to gauge the average situation in each country. Viewed in this light I would express the opinion that residential establishments are most suitable for the education of blind children.

A contrary situation exists among blind adults who for economic and other reasons cannot easily be separated from their homes and families. It is furthermore important that family members be instructed concerning attitudes and abilities of the blind. Home teaching is certainly the best method of achieving this. While it is unwise to set firm rules I would express the opinion that the home teaching service provides the most effective means of meeting the special needs and psychological problems confronting newly blind individuals. Some years ago the National Federation of Institutions for the Blind introduced training courses for home teachers. I had my doubts as to the success of the plan, mainly because of the poor home conditions of the blind people among whom the home teachers would chiefly work. Therefore I am particularly pleased to report that the fine results already achieved have led to my complete reassurance. The training courses for home teachers conducted in Rome, Florence, Naples, Padova and Trieste by Miss Gwyneth

Wallis produced a number of extremely competent teachers. The home teaching programs they have introduced are proving highly satisfactory, particularly in Rome, Genoa and Trieste. Results naturally vary in relation to the social, physical and psychological possibilities of individuals. Almost all the pupils can regain a natural demeanor, can travel on foot without guides and can almost always gain new hope in life and confidence in their ability to undertake suitable work.

Should teachers be blind or sighted? In each country this problem has been discussed without achieving a final answer. In Italy we have not yet gained sufficient experience to enable us to form a conclusive opinion on the matter. In my view, we cannot rule as to the suitability or otherwise of either group. A good teacher if himself blind can often inspire his pupils by demonstrating his own abilities. But a teacher must also judge, control, correct and stimulate. This work requires not merely knowledge gained through training, but natural qualities such as sensibility, sense of responsibility and common sense. Men and women with such qualities are rare among blind and sighted alike. Let us then select our home teachers on the basis of both their physical and moral qualities. If blind persons possessed of such qualities are not available let us engage seeing persons. It is the pupils who are our major concern. We must therefore concentrate on providing them with teachers of the highest possible caliber, supplied with all necessary equipment and materials.

Home teaching must be considered only as a preliminary step in the total rehabilitation process. After that the blind must find in rehabilitation centers the necessary training to finally prepare them for suitable employment. In Italy there are very well equipped rehabilitation centers in Florence and in Naples. A third is soon to be opened in Catania where a large blind population exists as a result of trachoma which is prevalent in Sicily. In Genoa we have a training center for shorthand typists, telephonists and clerks. During the last few years we have organized, under the jurisdiction of our government Department of Labor, special training and rehabilitation courses which last from six weeks to six months. Our experience to date is insufficient to allow us to reach definite and final conclusions, especially because, except in the cities of Milan, Turin and Bologna, Italy has a considerable surplus of unemployed manpower and employers cannot easily be persuaded to accept handicapped workers. We know that we have much to learn from industrialized countries which have had considerable experience in this matter. I share the opinion of those who believe

that centers must be neither very small nor very large, serving from twenty to thirty people at a time. Every effort must be made to ensure that students maintain contact with their homes and families throughout the training period. Rehabilitation centers must also seek to gain the interested support of the public and should encourage business leaders through visits to the center and other means to make their experience available to the project. The program must enable the students to maintain close contact with normal life to which they must return.

Any service which enables the blind person to mix more freely in the general community is important since it contributes to the growth of self-reliance. Personal mobility is important and should be encouraged. Guide dogs can play an essential part in achieving this and should be more widely used. Arrangements should be made for a remission of charges for guide dogs on railroads as the imposition of such charges would serve as a barrier to travel by blind persons. In Italy we have very efficient schools for guide dogs in Florence.

In serving groups of blind people we must stimulate competition between individuals. We must not by over-protection or over-indulgence sow the seeds of laziness, idleness and misanthropy. Our services must be designed to stimulate the desire of the blind to surmount their handicaps. Our purpose is to return to society self-reliant men and women and not puppets.

It is necessary that we should maintain lighthouses or other similar centers of social, cultural and recreational activities. We should also seek to increase available opportunities for international exchanges, especially among students and young workers. Our brotherhood in blindness will be better broadened through such relationships. All the young blind people whom we seek to serve must become increasingly aware that blindness need not prevent our partaking of a wide range of experiences. Our great family of the blind must never be a segregated unit withdrawn from the community at large, but must become integrated at all levels of society.

Pedagogy, technical developments, juridical and social advances of the last half-century have all envisioned the same ultimate goal — one which will assuredly be achieved — to give to the blind opportunities equal to those enjoyed by all other people.

CURRENT INTERNATIONAL ACTIVITIES FOR THE GENERAL WELFARE OF THE BLIND

Eric T. Boulter, Field Director, American Foundation for Overseas Blind, New York, New York

When I spoke to you earlier this week I described the various facilities that are available from international govern-

mental and non-governmental sources for the provision of fellowships, consultants, demonstration projects, etc., and which can be provided to schools, institutions and agencies responsible for the operation of service programs to the blind. Naturally those services, when extended, are designed to meet the most urgent needs of the recipient country. Therefore, if the most urgent requirement falls within the general category that we are considering at this session — that is, "General Welfare Needs," scholarships, fellowships, equipment and other assistance may be made available from the sources already described and geared to meet those special welfare needs. I shall therefore not duplicate my earlier paper but shall instead mention certain specific welfare problems that have received or are now receiving consideration in international circles.

As a member of the staff of the American Foundation for Overseas Blind I was particularly pleased to note Prof. Bentivoglio's reference to Italy's recent experience in launching a home teaching service to the blind. Certainly home teaching can be recognized as one of the most important methods of meeting the special welfare needs of the blind. In 1952, following discussions that occurred when Mr. Raverat and I visited Italy in 1950, the United Nations and American Foundation for Overseas Blind joined with the government of Italy and the Italian Federation of Institutions for the Blind in a unified program for training home teachers and introducing that country's initial service for instructing the blind in their homes. Training courses were provided for potential students in several Italian cities and in due course these trainees were placed in strategic locations by the Italian authorities, and thus began the process of rehabilitation in the home that we feel will lead to full absorption of many Italian blind people into normal pursuits. We are delighted to learn that the project has thus far proved successful.

I mention this matter solely to illustrate the sort of program that can be achieved if international governmental and non-governmental organizations are made aware of specific needs. Thus, if in your day-to-day work it becomes apparent that international assistance is required, it must be your responsibility to persuade your government to seek United Nations or UN Specialized Agency support. At the same time, you are urged to contact American Foundation for Overseas Blind or other voluntary society working internationally to assist. On many occasions it is possible for a joint project similar to that described above to be arranged to the mutual advantage of all concerned.

A matter that was discussed at considerable length at the Oxford Conference was the problem of making special aids, appliances, equipment, braille, talking books, etc., available to national programs when the production of such appliances was not possible within the country concerned. Many workers then reported that they were prevented from obtaining these appliances because of high import duties and other tariffs imposed on the importation of such supplies. Since the Oxford Conference this problem has been discussed nationally and internationally resulting in the adoption in December, 1950, of the UNESCO Agreement on the Importation of Educational, Scientific and Cultural Materials. This agreement contained certain clauses that on the one hand ensured the availability of foreign currencies to agencies and schools for the blind for the procurement of special equipment manufactured in another currency area, and on the other hand for the remission of import duties when such materials were purchased from abroad. This agreement is of the greatest significance to all of us and it behooves us as workers for the blind to take the strongest possible action towards ensuring that our respective governments take advantage of these facilities.

On July 31, this year, the governments of 32 countries had signed the Agreement and it had been ratified by nineteen national legislatures. While these figures indicate widespread international interest, they also show that many countries where we know special appliances to be in short supply have not yet taken action to assist responsible organizations to acquire such equipment. I would therefore urge all of you to inquire whether your governments have signed or ratified the Agreement. If not then you should use all your influence to ensure that such action is taken with a minimum of delay.

The Universal Postal Union, having been made aware that many blind persons were being denied access to braille literature and other supplies because of the high mailing costs imposed in certain countries, adopted a resolution in 1952 which allowed all countries to accept braille material, master talking book records, braille printing plates and other supplies free of mailing costs when sent to foreign addresses. So far fourteen countries have introduced limited concessions such as the grant of rates similar to those which apply for internal carriage of mail. Here again it will be seen that the strongest representation should be made to all governments which have not yet taken fullest advantage of the UPU recommendation so that all blind people may look forward to receiving adequate supplies of braille and embossed literature.

One of the principal welfare problems faced by blind persons is the matter of travel. In most countries represented here recognition of this problem has been granted through the introduction of special inland travel rates allowing blind persons to travel on national and sometimes private railroads with a guide while paying one fare for both. Of international importance is the matter of travel from country to country. At present one or two shipping conferences grant fare concessions by which a blind person with a guide can travel upon payment of one and one-half normal fares. International air transport companies at present provide no fare concessions. Conferences have taken place between the World Council and UNESCO with a view to the incorporation of special paragraphs covering international travel by blind persons in a convention dealing with the international exchange of persons now being proposed by UNESCO. A questionnaire has been sent by UNESCO to all its member governments seeking recommendations on all aspects of international exchange of persons including this question concerning travel concessions for the blind. The governments are requested to indicate whether or not they agree with the principle that blind persons should pay only one fare even when traveling with an escort. So far only eight replies have been received and UNESCO is in process of circulating a reminder to all governments. I would urge all of you to take up this matter when you return home to ensure that when replies to the questionnaire are submitted, your governments give their unqualified support to the suggested travel concessions to the blind.

Braille and talking book literature obviously serve as one of the most important aspects of welfare services to the blind. During recent years AFOB has given, in accordance with its tradition, particular attention to the establishment of braille printing plants, thirteen having been set up in European, Middle Eastern, Asian and Latin American countries since World War II. If inadequate braille production is a problem now facing you, you may be sure that the AFOB Board of Directors will be pleased to consider any request which you may care to submit. Similarly the United Nations has co-operated in the establishment of braille printing plants in such countries as Czechoslovakia, Turkey and Egypt. The UN representative at this Conference will be pleased to give you more information as to the UN attitude in this matter. However, from experience I may say that the international organization is ever willing to consider reasonable requests submitted to it by governments in all parts of the world.

There are other problems which I cannot fully discuss today

since international discussion has so far only achieved limited objectives. High on the list is the matter of guide dogs. We are informed that international complications arise both in the provision of opportunities for blind persons in less developed areas to visit other countries for training with their dogs at recognized centers and in the operation of quarantine laws which in some countries appear to cause great hardships since they forbid the admission of guide dogs with their masters. Nevertheless, you may be assured that the World Council Executive Committee, American Foundation for Overseas Blind and all other international agencies mentioned in my earlier paper will do all in their power to assist in the international development of adequate welfare service providing we are given full details of the needs that exist. We now look to you to acquaint us with those needs.

M. Rene Guicharnaud, Director of Rehabilitation of the World Veterans Federation, was introduced at this point and made the following comments.

The World Veterans Federation has followed with the deepest interest the remarkable work of the World Council for the Welfare of the Blind in its efforts to improve the situation of its members, regardless of the scope of the problems presented.

I am very honored to be representing today the World Veterans Federation and its President and Secretary General, Messrs. Albert Morel and Elliott H. Newcomb, whose duties have called them out of town. Messrs. Morel and Whitcomb requested me, before their departure, to convey to you their best wishes for the success of your General Assembly. I am happy to be able to add to their wishes my personal expression of the admiration aroused by the remarkable results already achieved by the various sessions of this Assembly.

The problems raised by the social welfare of the blind are of the greatest interest to the WVF despite their complexity — I might even say because of their complexity.

These problems are indeed quite varied, depending, for example, on:

1. the circumstances causing blindness
2. the characteristics of the country
 - a. its state of economic development
 - b. its state of technical development, and in particular of
 - c. its medical-social services.

These matters have been examined during the present General Assembly and I should like to mention this particular point again only to indicate the attitude of the WVF, whose General Assembly declared as early as 1952 — I quote the text of

Resolution 11, Committee I: "that the World Veterans Federation shall establish the closest contact with the World Council for the Welfare of the Blind and help them to solve the problem of the rehabilitation of the blind."

As to this point, I take the liberty of reminding you that the World Veterans Federation is still a young organization, having just completed its third year of existence. One can measure the ground that has been covered since the day a handful of visionaries, as they were called at the time, met together in an attempt to co-ordinate the efforts of veterans to bring about and to maintain world peace and to help solve the problems of those who suffered in war. The World Veterans Federation at present represents 18 million veterans in 25 countries.

The WVF will be delighted to continue its co-operation with the World Council and other organizations interested in the same matters, such as the American Foundation for Overseas Blind. Despite the privileged place that you have given me in this program, between the part of the session devoted to the problems of the civilian blind and that devoted to the war blind, I do not want to go into detail here about the projects that interest us. The World Veterans Federation always gives priority to veterans, but this priority is in no case exclusive.

Mr. President, I wish to thank you for having permitted me to state the position of the World Veterans Federation concerning the problems that concern the blind, problems in which we are deeply interested, and I should like to repeat our sincerest wishes for the success of the task which the World Council has undertaken.

WHAT SPECIAL AID IS NECESSARY AND EFFECTIVE FOR THE WAR-BLINDED

W. G. Askew, C.B.E., Secretary, St. Dunstan's, London, England

I am grateful to the Program Committee for giving me an opportunity of speaking on the subject of the war-blinded.

The world has been confronted in the past forty years with two major wars, and these devastating conflicts have imposed on a large number of men, women, and children grievous disabilities from which they will suffer all their lives.

In the First World War the casualties were almost entirely confined to the fighting forces — the Navy, the Army, and the Air Force — but in the Second World War the air offensive affected — in many European countries — not only the fighting forces but a large section of the general population. This air war necessitated the creation of an arm additional to the fighting forces, comprising air raid wardens, fire fighters, special police,

special nurses, etc. In Britain members of this auxiliary body disabled on duty were treated broadly, for pension purposes, in the same way as members of the fighting forces, and the organizations responsible for the Service war-blinded have accepted members of this auxiliary arm as they have the blinded members of the Navy, Army, and Air Force. I should add that those blinded in air raids who were not attached to these auxiliary Civil Defense services have, in Great Britain, remained the responsibility of the organizations dealing with the general blind population.

The Service war-blinded in all countries receive pensions from their Governments. It is common practice to accept blindness as a 100% disability, but the scale of pensions in issue — measured in terms of the purchasing power of these pensions in the respective countries — varies materially, and in some countries the pension in issue is conditioned by the private means of the person. The fact remains, however, that all the war-blinded are in possession of an income and to that extent are, broadly speaking, in a more favorable financial position than the general blind population.

People are inclined to think of the war-blinded as being only those who lose their sight during the fighting, but this is not the case. There were many who received what was thought to be a relatively trivial eye injury during hostilities, but who have gone blind from that injury many years later, and these are in every sense of the word war-blinded. Again, there are some who lose, let us say, the sight of one eye from a war wound, subsequently losing the vision of the other eye from a natural cause. My government gives a 40% war pension to a man who loses one eye as the result of a war cause and increases this to 70% pension if he subsequently loses the sight of the other eye from a natural cause. Such cases as these are not in the strict sense of the word war-blinded, although they are accepted for rehabilitation, training, etc., by the organizations in my country charged with the care of the war-blinded.

Whilst I am on the question of pensions, may I digress for a few minutes to explain what has happened in Britain to those blinded in industry. I have always held the view that the award of a pension for blindness arising out of war service, or from an accident sustained by a workman in the course of his duties, or as the result of an industrial disease, should not be affected by subsequent earning capacity, and this has always been the case in respect of the war-blinded and war-disabled in my country. It has, however, only been extended within the last few years to the industrially injured. At one time their pension was

reduced or taken away on account of their earning capacity after blindness, but now this has been amended so that the industrially injured are treated in the same way as the war injured. The industrially blinded are not, of course, the responsibility of the organizations charged with the care of the war-blinded, but I thought the Assembly would be interested to hear that the Government of my country has accepted responsibility for industrial injury pensions in the same way and on the same basis as for war pensions.

The responsibilities of Governments and peoples do not end with the award of a pension to a war-blinded person, no matter how adequate or generous. There is a responsibility for rehabilitating him and for training him so that he can, if his condition permits, again play his full part in the life of the community.

In Britain two voluntary organizations — St. Dunstan's and the Scottish National Institution — both of them founded in 1914, have been charged with and have assumed complete responsibility for the rehabilitation, training, placement, and after-care of all men and women of the Armed Forces who have been blinded as the result of war service, and since 1939 they have assumed similar responsibility for members of the Civil Defense Services which I have previously described.

St. Dunstan's is responsible for 90% of the war-blinded in Britain and the Scottish National Institution for the remaining 10%, and both of these organizations work in close co-operation with each other and with the appropriate Government Departments and organizations dealing with the blind population generally. Some 3,200 British men and women were blinded as a result of service in the First World War, 1,950 of whom came under our care before the end of 1921, which was two years after the end of hostilities, the remaining 1,250 having been admitted since that date, of which some 30 were actually admitted during the past year. Of this total number of 3,200, 1,450 are still alive and are under our care.

From the Second World War 1,100 have come to us, and of this number 850 were admitted up to the end of 1947 and 250 have been admitted since.

St. Dunstan's, in addition to assuming responsibility for the men of the British Isles, trained a number of Dominion war-blinded on behalf of, and in conjunction with, their kindred organizations overseas, with whom there has always been a close co-operative and friendly link. The figures I have just given you do not of course include these, and the figures I shall be giving you later apply only to St. Dunstan's men in Britain.

During both wars St. Dunstan's had one large Rehabilitation and Training Centre to which all war blinded were admitted. During those wars and for a year or two afterwards there was a large intake discharged to us from the military hospitals as soon as their condition would permit. Subsequently men came to us in fewer numbers, necessitating the maintenance of a much smaller Rehabilitation and Training Centre.

The considerations involved in training and providing employment for the war-blinded differ in some ways from those affecting the general blind population. One important distinction is that the great majority of the war blinded are physically fit young men blinded in the prime of life, whereas those of the general population who become blind do so in a wide variety of circumstances. The war-blinded are thus often able to absorb the necessary training more easily and can adapt themselves better to new forms of employment.

We have consistently taken much trouble to ensure that each of our war-blinded men receives training in the occupation best suited to his capabilities and desires, and where suitable work is not available in a man's hometown, we will if necessary acquire accommodation in another town and move the man and his family to it.

During and after the First World War we trained numbers of war-blinded persons as physiotherapists, telephone operators, poultry farmers, and shopkeepers. Those who were considered capable of entering the professions or of undertaking administrative or executive positions were assisted to do so. The remainder were trained in the traditional crafts of mat, wool, rug, and basket making, netting, joinery, and boot repairing, with a view to their employment in our home workers scheme. This scheme still operates and the men participating in it are supplied with the raw materials they require at cost price or under, and — with the exception of the boot repairers — they send to us for disposal all articles made by them which they cannot sell in their own locality.

Between the wars much thought was given to the possibility of extending the field of employment of blind people in open industry (i.e., in factories). In 1935 we set up a small Machinery Department where blinded soldiers operated various machines and undertook a variety of assembly jobs on normal factory mass production principles, and demonstrated that blind people could be employed in open industry on repetitive work side by side with sighted workers. The logical development of this experiment would have been to seek to place men in open industry, but at that time there was much unemployment amongst sighted operatives.

The advent of the Second World War brought not only a new generation of young war-blinded men, but a period of full employment, and in the light of the work started in 1935 we began to train men to undertake work in open industry.

We have continued to train and find employment for many of our men in professional and administrative posts. Increasing numbers have been placed in employment as physiotherapists, telephone operators, and shopkeepers. Only a few men of the Second World War have expressed a desire to be trained as homeworkers although, as I have already said, our homeworkers scheme is continuing to assist those men of the First World War who are still working and the small number of Second War men who wish to participate in it.

The pattern of the assistance which we make available to a blind man or woman is a comprehensive one of rehabilitation and training as well as placement and after-care. We find the job, or the farm, or the shop, and — having found it and placed our man in it — he is visited periodically by an expert in the particular kind of work which he is doing. This technical after-care service is particularly appreciated by the employers of our men in open industry who know that if any difficulty should arise the technical visitor is available for immediate consultation.

It will be appreciated that many of the men and women blinded in the First World War are now past working age, but 63% of them are still working. Of this number 56% are homeworkers, the remaining 44% being engaged in the professions and analogous occupations, in running their own small farms and shops, and a small number in open industry.

The figures in relation to the Second War blinded are as follows: 12% are engaged in the professions, as physiotherapists, and in sundry parallel occupations, 16% run their own small farms and shops, 43% work as telephone operators and factory operatives, and 11% on homecrafts. This homecraft group is largely made up of men whose health is such that they are only able to undertake light work. Seven percent are in training, leaving 11% who do no remunerative work, although all of them have received periods of rehabilitation and are occupied where their health permits, in various ways.

We have a comprehensive after-care system staffed not only by technicians but by general welfare workers who are able to assist with family difficulties and sickness, and we have a holiday home to which all men can go. We also have a convalescent home where it is possible for short or long periods of convalescence to be given and, for those men who are so sick that they require permanent care, there is a home with adequate medical and nursing

staff. We have a separate home for our war-blinded women and also a home for the children of our men and women.

A Braille Library and a Talking Book Library are available, and those of our men who wish to have a guide dog can do so. We provide braille watches, braille writing machines, typewriters, and indeed any special equipment which a man can use to advantage in his working life or leisure.

My country is small in area and its population largely centralized, which simplifies St. Dunstan's problem as regards placement and after-care, permitting us to operate a system whereby one organization can deal with all the requirements of its war-blinded. However, I can see that it may be difficult to operate such a system in a large country, or indeed a continent where, instead of being aggregated in appreciable numbers, the war-blinded are scattered over very wide areas; but I am sure that basically one organization charged with every facet of the problems of the war-blinded must have an advantage over a system under which different organizations and different departments each handle separately various parts of the problem, no matter how close a liaison there may be between such departments.

Of one thing I am certain—if we are to give efficient service to our war-blinded, then we must make available to each a full rehabilitation, and the opportunity to be trained in the occupation to which he is best fitted with rapid placement after that training, and the necessary after-care so that he can enjoy not only an agreeable and interesting working life, but can take part in the cultural, civic, and social life around him; and I do not exclude the war-blinded with additional disabilities such as deafness, the loss of a hand or both hands, or a leg. One of our deaf-blind basket makers uses most of his leisure in making quite excellent precision model boats. A handless blind man, who operates a small specially adapted telephone switchboard, is a keen amateur walker and puts up just as good a performance on a 25-mile Walk as his sighted two-handed competitor. Each in his own particular and chosen way continues to enjoy life and the interest it brings.

Blindness is a challenge — not only to the blind person himself but to those of us who are charged with the responsibility of advising and assisting him, and we must see to it that the men who are blinded in the service of their country are given every help and encouragement so that they may, in spite of their handicap, remain useful, contented, and active citizens.

SUPPLEMENTARY INFORMATION ON SERVICES TO THE WAR BLIND

Henri Amblard, Secretary General, Union des Aveugles de Guerre,
Paris, France

Three thousand war blind were among those disabled in France by World War I. For these men who lost their sight in the prime of life it was urgent that a whole rehabilitation system be set up, and many schools for the war blind were therefore opened throughout France.

We will not review all that was tried at that time as the list would be very similar to that which Mr. Askew has just mentioned in his report. We can but say that investigations were made in all possible directions in the hope of opening up new opportunities for occupations, trades or professions for our newly-blinded men.

It was not during the 1914-18 war that our country felt the full weight of her sacrifice, for jobs were found more easily at that time. At Thomson Houston's and in the Citroën factory certain crafts were temporarily adapted to the blind, as were ceramics in the Sevres workshops and glass-cutting. On the other hand, commercial travellers, masseurs, piano tuners, shop keepers, chair menders and brush and basket makers were a more permanent success. Some of our war-blinded even undertook the difficult task of teaching at elementary, secondary and university levels. Blind lawyers held their own at the Bar. There have been blind members of Parliament and there is now one blind Senator. I must mention in passing that music, which requires immense skill in braille reading, is almost out of the question for the war blind.

World War II brought us fewer blind soldiers, but the bombings we underwent in France caused many civilian victims, and these were admitted to the Union of the French War Blind, founded in 1918 to uphold the rights of the war blind.

It was on March 31, 1919, that a fundamental law passed through Parliament asserting the right to compensation. This law has enabled us to obtain pensions in accordance with the cost of living. So between the two wars, when the different crafts and trades of the blind brought in smaller profits (brushmakers, for instance, found it hard to compete with open industry) it was the Union's task to obtain higher pensions to make up for the hardships caused by the economic crisis.

The presence of the Germans during World War II made any serious training for those wounded in 1939-40 almost impossible. With the Liberation came another group of war blind who received training, as do the men returning from Indo-China, numbering about 80. It must be remembered that from wherever they may come, men blinded in war often have other wounds, sometimes the loss of both hands, which make training particularly difficult.

However, their stay in our hostel (at 49 rue Blanche, Paris) is a great moral help which enables them to get a firm foothold in life.

The Union of the French War Blind has laid great stress on the social side of its activities. We own three homes, at Franceville on the coast near the beaches where the Allies landed; another at Carnoles near Menton on the French Riviera; and the third at Amelie-les-Bains in the Pyrenees—36 flats in all for the use of our members for their health and their holidays.

In our Paris hostel we have set up talking book apparatus and studio and are already beginning to record on tape. Our braille library is located in the same building. The financial aid we furnish is of great importance to the sick, for though we are included in the National Health Insurance system, our funds often cover additional expenses. Our Union also provides scholarships to deserving children and orphans and loans to those wishing to build or buy homes. It may well be said that the Executive Committee, in accordance with the general wishes of the members, always takes into careful consideration any misfortune which may befall a member of the French War Blind.

Men from the two world wars have joined forces at the head of the Association and recently we obtained a guarantee which may be of interest to any among the blind who are in need of pensions or allowances. It has been agreed that there shall be a constant ratio between a civil servant's salary and our pensions. This law passed through Parliament and has come into force, so we need no longer make repeated demands in order that our pensions may maintain their relative value.

I would like to stress the fact that pensions are granted to all those who lost their sight for their country, regardless of race or color. Pensions are the same in overseas colonies and mandates as they are in France.

And now, in the belief that the Union of the French War Blind has attained its main objectives, we may look to our next duty. We remember that in 1914 when the first wounded soldiers came home the civilian blind offered their services, imparting their knowledge of braille, of different crafts and professions and giving us confidence in life. We shall not forget their sympathy and it is our wish to return—to the best of our means—the help they gave us. We assure them of our friendship and our support of their efforts to obtain means of living in a decent, honest way.

This is one of the earnest wishes of the war blind who fought for an ideal and who were wounded for their country and for Liberty. They ardently hope that their sacrifice will serve coming generations so that they may live in good fellowship, understanding and peace.

RESOLUTION XI

The World Assembly of the World Council for the Welfare of the Blind resolves to address an official and formal request to the International Air Transport Association urging that organization to grant a general fare concession to the blind, which would allow a blind person, accompanied by an escort, to purchase two tickets for the price of one ticket at the ruling rate for the class of travel being used. It is further resolved that all Governments, Air Lines and other interested groups be urged to use their influence in securing such concessions to the blind in their respective countries.

TWELFTH AND THIRTEENTH SESSIONS

Thursday Morning and Afternoon, August 12, 1954

EXPANDING HORIZONS FOR THE BLIND THROUGH TECHNICAL SCIENCE

Chairman: Prof. Dr. Carl Strehl, Chairman, WCWB Committee on Technical Appliances; President, Verein der blinden Geistesarbeiter e.V., Marburg/Lahn, Germany

It is a great pleasure for me to hold the chair today at the invitation of the Chairman of the Program Committee. I am grateful for this commission and ask for the kind co-operation of all present.

Technical science is the motto of the whole century. And blind welfare cannot progress without this science. We all are striving for new technical appliances. For more than one hundred years work in the field of blind welfare has been carried out efficiently and systematically. In their endeavors to make blind persons as independent as possible, workers for the blind have profited by technical developments.

The blind are in need of appliances which will give them the greatest possible independence from other people's help. The invention of the typewriter was an important step for them. Braille has considerably facilitated the approach to literature. None of us can get along without braille, and we are heartily thankful to all, blind or sighted, who are striving for the improvement of braille production. But braille will always allow only a limited reading speed and selection of titles. The talking book and reading machine for the blind might bring the solution to these problems closer. One sample of this type of apparatus is already at our disposal, and must only be perfected. The reading machine exists at present only in museum pieces, although scientists and technicians of various countries have toiled diligently on this task during the last fifty years.

The blind with additional handicaps, especially the deaf-blind, must be enabled to communicate not only with their relatives, but also with friends and other persons they meet. They want a communicator, and would be thankful if a simple serviceable apparatus could be found.

Realizing that blind welfare profits greatly by science and technical advances, the World Council for the Welfare of the Blind has appointed a Technical Sub-Committee with the purpose of keeping in touch with all technical improvements relating to the blind. In the last three years this Committee has met three times — in 1952 at Marburg/Lahn, in 1953 in Paris and in 1954 in London. During these meetings and through correspondence the Committee studied many new appliances and tried to deter-

mine which would be the most useful and should therefore be recommended.

The papers to be presented during this meeting will give the Assembly a summary of what has been accomplished, what is still in the course of development and what remains to be developed in the future. We all hope that technical science will bring further progress and improvements so that the blind may gain increasing independence.

DEAF-BLIND COMMUNICATORS AND MISCELLANEOUS MECHANICAL AIDS

Prof. Dr. Carl Strehl, Chairman, WCWB Committee on Technical Appliances; President, Verein der blinden Geistesarbeiter e. V., Marburg/Lahn, Germany

The report on this subject can be but a short summary of the very detailed material I received from the different member countries in Europe and the United States in reply to a circular letter sent out last year. Please let me thank all those deaf-blind persons and consultants working on this problem who have been kind enough to go into detail. It will be impossible to cite all the material, but as in most points the information reaches the same conclusions, I summarize the most valuable facts forwarded to me.

The greatest problem facing any deaf-blind persons is that of communicating with others, regardless of whether they are deaf-blind, blind or sighted. We do not know the total number of deaf-blind persons in the world, but we know that up to now very little has been done to solve their problem of communication. The gravity of their handicap obliges us to do our best to help them to overcome their physical troubles, emotional depressions and the difficulty of communicating fluently with others. Many of those who have been registered in Europe and North America are too deaf to benefit from amplification of any kind, and must make use of other means of communication. Some experience has been gained in five methods of communication with deaf-blind persons who are literate.

1. For the deaf-blind who do not know braille, but are familiar with normal print and script.
 - a. Such persons can use adaptations of the systems that serve the deaf and mute in communication: the *one-hand manual alphabet* of the deaf, the *two-hand manual alphabet* and *printing or script writing in the palm*.
 - b. The *alphabet glove* is internationally known. It is generally worn on the left hand, can be marked according to the shape of the individual's hand, and can be bought in many general agencies of and for the blind.

The letters of the alphabet are marked in indelible ink or print. They are located on the palm and on the back of the hand, the location of the letters unfortunately varying widely according to national custom. The deaf-blind person extends his left hand towards the blind or sighted person with whom he intends to communicate. The speaker presses the letters in succession forming different words. The mute deaf-blind person, knowing their location, answers by touching the letters in the same manner. Considerable speed can be developed through practice.

Most institutions educating deaf-blind persons, homes or hostels in which they live and the deaf-blind who spend most of their time with their families believe that the glove is the simplest, cheapest and most convenient medium of communication. If it has not yet reached the high frequency of use that it should, perhaps this is due to a psychological feature. This method requires direct physical contact from which the average sighted person tends to shy away. All deaf-blind and consultants emphasize however that the deaf-blind seek this personal contact. The touch of hand upon hand can establish a rapport similar to that developed through auditory or visual stimuli. For the deaf-blind person the hand takes the place of a smile or tone of voice. Touch gives the tapped words the necessary accentuation and makes them vital. The deaf-blind person is able to recognize from the unintentional and slight gestures of the partner's hand whether he is attentive, earnest, cheerful, indifferent or in any other mood.

- c. In the use of *cut-out print letters* in plastic or wood, words are spelled to the deaf-blind person by handing him the letters in succession. All agree that this method might be used with elderly people who have no knowledge of braille and other devices. The shape of the letters is familiar to the doubly-handicapped and gives him at the beginning a certain inner security.
2. The deaf-blind who are acquainted with braille.
 - a. *Alphabet cards, plates and boards* are manufactured with variations of markings, size and material all over the world. Most of them have the normal print or script alphabet, while some also have braille or Moon characters, in four rows, three for the letters and one for the numerals. Those which also contain braille are preferred. One type of conversation board has

the braille embossed on a transparent celluloid cover, beneath which printed letters, numerals and alphabetically arranged selected basic words can be read. All these appliances may be used in conversation with blind or sighted persons. The speaker puts the finger of the deaf-blind person on the braille character, and those deaf-blind who cannot speak adopt the same procedure for replying. Of course, in order to communicate quickly, the deaf-blind person must in time memorize the exact position of the letters.

- b. *A number of varied Alphabet rulers, round and arched discs* are manufactured. Some have the braille alphabet facing the deaf-blind and the corresponding inkprint facing the sighted. Others again have braille and ink characters facing both. In the middle of the ruler is a slide. Fastened to it is a bar crossing the whole board with a hole or cup at each end. When the sighted person has an inkprint symbol under his cut-out, the deaf-blind person has the corresponding braille symbol. The round disc is used in a similar way. The speaker moves the pointer fastened in the center to the desired character and puts the receiver's finger into the cutout. Even better is the double-sided ruler or arched disc. When the slide carrying the double-sided pointer is pushed to the right or the left, the cutouts show the print and braille letter to be read or felt by the sighted, blind or deaf-blind person. On the arched disc the pointer is fastened at the exact center of the board and extends over the whole device. When the bar is moved, the ends swing in opposite directions, showing both braille and corresponding print letters on each end of the board so that the cutouts at the ends of the bar automatically indicate identical letters.

It seems that these letter devices, if well constructed, not too large or too heavy, and low in price might meet with the approval of numerous deaf-blind persons.

- c. One older apparatus, the German *deaf-blind communicator*, and two newly constructed machines, the *Arcaid Conversation Machine* and the *Tellatouch*, remain to be mentioned.

The German device is a simple little box with a braille keyboard on one side and a braille cell on the other. It is also often manufactured with keyboards and cells on both sides for conversation between deaf-

blind persons. Anyone who knows braille can communicate quickly with this apparatus, especially when using braille grades II or III, according to the intelligence and knowledge of his partner.

The second device is the Arcaid, of which at present only a few models are available. The inventor is Mr. A. R. Cooper of Manchester, England, who works in collaboration with the Royal National Institute for the Blind and the National Institute for the Deaf, with financial assistance from the Carnegie United Kingdom Trust. The whole mechanism of this machine is in a box, size about 7 x 3½ x 1½ inches, weighing about two pounds. On the side facing the speaker it contains a keyboard arranged in three rows similar to that of a normal typewriter. On the opposite side on the deaf-blind person's right is a braille cell, on which he can put his finger. When the speaker presses a key the deaf-blind person automatically feels the appropriate braille symbol. This machine is still in development stage. It can be fitted with a printing mechanism so that it will be possible to type short messages onto a strip of paper. In addition, the machine is adapted to receive a plug-in connection, which will connect it to one or more communication points operated by dry batteries, thus allowing the possibility of communicating with a group of deaf-blind persons simultaneously.

The last device is the Tellatouch recently developed by the American Foundation for the Blind and already in production. Its size is nine inches square, two and one-half inches high, and weighs three pounds, seven ounces. It resembles a small portable typewriter, containing an alphabet keyboard with a braille cell on the opposite edge of the baseboard. Writer and receiver face each other. When the writer presses an alphabet key, this is felt by the deaf-blind person in the cell as a braille character. There are three alphabetically arranged rows of keys, and a fourth row with six braille keys, in the center of which is the space bar. For clarity the space bar is used between words in both cases. Both of the latter machines are easy to operate, portable and are supplied in leather covers with hand or shoulder straps. Of course all these machines can be improved to operate electrically, and I am sure that it is also possible to attach additional braille cells to them, so that any number of persons may receive messages.

Only long experience can show whether the manual glove or a simple or more elaborate device is the best means for the deaf-blind to communicate with the deaf-blind, blind or sighted.

Deaf-blind communication devices have a limited sphere of action, as most of them can be used as presently constructed only by persons knowing braille. Faster and less remarkable in use is an efficient manual alphabet which also has the advantage of allowing the use of contractions. Most intelligent young deaf-blind persons use no mechanical appliances. They converse by using the manual alphabet which they shorten according to the contracted braille system. Others are of the opinion that the hand is the most natural transmitting and receiving medium and always available when needed, especially in emergency cases.

However, deaf-blind communication devices will always be of use in certain individual cases such as when conversation takes place with several deaf-blind persons at the same time, when the seeing partner shrinks from physical touch or is not acquainted with the manual alphabet. For this reason the deaf-blind communication devices manufactured in many countries in various shapes were always sold only in single pieces, and deaf-blind persons and consultants are still looking for a better means to solve this problem. They feel that the most universally acceptable type of communicator for the deaf-blind would be that which is produced along the simplest and least expensive lines. We recommend that steps be taken to establish an international manual glove alphabet, among the Western countries in the first instance, and a small international body of experts, three deaf-blind and one sighted consultant, to examine which devices will be the best for their personal use.

DEVICES FOR ASSISTANCE IN MOBILITY

Charles Hedkvist, Secretary, De Blindas Forening, Stockholm, Sweden

Blindness is above all a technical handicap, and the psychological consequences incident to blindness are, in the first place, tied in with our ability to solve the technical problem. It is important to state this since it must lead to the conclusion that the psychological complications connected with blindness cannot be overcome if the obstacle that causes them cannot be removed. And since fundamentally they originate in technical problems, the latter must receive our full attention.

My task today is to touch on but one phase of the great complexity of problems — the problem of mobility. It is primarily during the last decades that the question of aids for the blind for solving the mobility problem has become the object of considerable attention and that a series of different proposals has been

made. In this sphere as in many others, however, one might say that the simpler the aid the greater its prospects of proving useful to the greatest possible number of people. In this connection the simplest and oldest aid is the cane which, for the present, is also the most useful.

The cane as an aid for the blind is surely as old as the human race; recently however efforts have been made to improve the cane in order to make it as effective as possible. Consequently today there are a number of varieties: long canes and short ones, canes with hard ferrules and canes with soft ones, canes with a wheel at the tip, canes covered with light-reflecting material, canes provided with lights, folding canes, etc.

One of the reasons for the almost chaotic conditions prevailing in this respect would seem to be the fact that there is no clarity as to the object we have in view. People are not very sure as to the effect they wish to produce; they merely have a vague idea that they desire to help the blind to manage for themselves as well as possible.

What then should the objective be? In my opinion one should not only aim at making the blind as independent as possible, but also at making them appear as normal as possible. Some years ago I met a man in London who had mounted the signal-horn of a motor bike on his stick. He ran no risk of passing unobserved. This was a highly effective aid, but it was not a good one since it made the blind man appear all too different from other people.

It is, however, necessary to show by some distinguishing mark that a certain person is blind so that the rapid traffic of today should be enabled to take necessary precautions. When this problem first became urgent, attempts were made to mark blind people by providing them with sleeve-bands with black spots, to serve as a sort of stop-signal. This form of traffic mark was adopted in some countries, but in most places its use remained restricted. Later on, however, it was thought that since most blind people at all times use a cane, this should be made to serve as a traffic mark. Accordingly the white cane was launched, and it has since then marched to victory all over the world. It is true that sleeve-bands are still used in some places, but no doubt they will be entirely replaced by the white cane.

In order to make the cane even more effective as a traffic mark, attempts have been made in some places to cover it with a material which will reflect, for instance, the headlights of motor cars, and thus make it easy for the drivers of motor vehicles to see it even in the dark. Such an arrangement is sure to provide greater safety for the blind and may therefore be recommended. I am more skeptical, on the other hand, as regards attempts to have special lights installed in the cane. On the one hand such an arrangement

is probably less safe than the light-reflecting cane, and on the other the device requires a certain control to ensure that it functions satisfactorily.

In the United States the long cane has recently been introduced as an aid for the blind. A long cane obviously makes it easier for the blind to discover obstacles in their way, but in my opinion it can hardly be recommended for normal use. Strictly speaking, there is only a difference in degree between the stick with a signal-horn attached to it and the very long cane.

The latter has an important function to fill for the training of persons who have become blind as adults. However, even in this case the object in view should be to make the blind appear as normal as possible, and a change to a normal cane should therefore gradually be made.

As I mentioned before, a great variety of canes exists, but I shall not enter into any details regarding them since details are devoid of importance for practical purposes. I only want to draw your attention to the folding cane as a practical aid, provided it is not made too heavy and provided it is easy to fold and unfold.

What is more important than small variations in the construction of the cane is that the blind must learn effectively to avail themselves of the possibilities it affords. This implies a systematic training under an experienced instructor if good results are to be obtained within the shortest possible time. Here, as in many other instances, a distinction should however be made between blind children and adults.

The blind child has a considerable capacity for adjusting its remaining senses to the increased demand blindness makes upon them, and it is important that these natural propensities should be utilized as fully as possible. The best results will only be achieved by a combination of the natural capacity of the child and technical aids. If, however, a child comes to rely on something outside its own self, whether this is another person or a technical device, this tends to delay the development of the child's natural capacity. As regards blind children, efforts should therefore be made as early as possible and as definitely as possible to develop the child's capacity for orientation in the world that surrounds it by means of its hearing, sense of touch, etc. In this way one helps the child even to surmount the psychological complications connected with blindness, the tendency to isolate itself, the feeling that it is different, etc., before these have marked the child too deeply. The blind child should also be given the opportunity of effectively using such aids as the cane, but such opportunities should not come too early.

For children the long stick would not appear necessary, perhaps not even desirable, provided, naturally, that their general capacity to adjust themselves is found to be satisfactory.

For the newly-blind adult the situation is entirely different. Of all the problems that face the newly blind, the problem of mobility is the first, the most obvious and the most disturbing. It will therefore in the very beginning overshadow all the others. Only gradually will the adult blind become capable of seeing every detail of the complexity of problems inherent to blindness, in the right proportion. What has to be done in these cases is that, first of all, confidence in his own capacity must be restored before the psychological complications succeed in marking him too heavily. It would take too long a time if one were to rely on the successful training of his remaining senses and besides the adult blind has by no means the capacity of the child for naturally adjusting himself to blindness. From the very beginning therefore all the available aids must be utilized, and for the process of his adjustment the long cane is very valuable. But not even in these circumstances should one forget that aspect of the object in view which stipulates that the blind should be given possibilities for appearing as normal as possible. The training should therefore aim at effecting a gradual change-over to a cane of a normal type and at avoiding all conspicuous movements.

I am fully aware of the fact that it is necessary to depart from the principle discussed here according to individual conditions, but it is nevertheless important that the general objective should be made clear.

An aid which is of extraordinarily great value for the comparatively small group which can make use of it is the guide dog. Dogs to guide the blind are no recent discovery, but it is only during the last 35 to 40 years that dogs have systematically been trained for this task. Very rapidly the idea has gained popularity, and several countries have begun to train dogs as guides. In many cases, however, this training was anything but satisfactory. It was further discovered that owing to individual circumstances, for family reasons and owing to the conditions prevailing in their homes, at their places of work, etc., only a comparatively small number of the blind could fully utilize the services of a dog. A guide dog is rather an expensive aid, both as regards acquisition and maintenance, and in this sphere fairly important sums have probably been invested to no purpose if one is to judge from individual results. To those who can make effective use of a dog, however, the latter presents such a great advantage that the risk of failure has to be taken. To this must be added the purely humanitarian benefit derived by the blind who in their dogs possess a companion and a friend.

Of all the available aids the dog may be said to come closest to the Utopian dream of the blind that they will get another pair of eyes, but this can hardly be said to have made the dream come

true. During the last world war, however, appliances were invented which no longer made the idea of artificial sight appear only like a Utopian dream. The invention of radar made it possible to see in the dark. This seemed to solve the problem even where the blind were concerned. By the end of the war notices appeared in the press announcing that in England and the United States appliances had been constructed by means of which the blind could travel freely out of doors. This naturally aroused hope in the blind that revolutionary developments were at hand. Today, ten years later, the majority have probably become resigned, since the problem would still appear unsolved. However, ten years is a comparatively short period. One must keep in mind moreover that in this sphere developments are not stimulated by economic interests. It is a fairly long way from the radar devices installed on board boats and aircraft, where it means discovering objects at a great distance, to an appliance for use by the blind which is to enable them to "see" objects at distances ranging from some decimeters to several meters. This would in fact imply an entirely new technique.

In the course of the last ten years a whole series of appliances intended to serve as mobility devices for the blind have been manufactured and tested, mainly in the United States. I do not propose, however, to describe these in detail, partly because I am not sufficiently familiar with them and partly because among those present there are persons who have themselves been working on these problems and thus can supply much more accurate information. I shall limit myself to stating that, at least in certain circles in the United States, people feel they have progressed so far that within a few years they will be able to produce a practical apparatus with whose aid the blind will be able to discover and locate obstacles, steps, depressions in the ground, etc. I do not know to what extent this apparatus may be expected to help them in avoiding moving traffic.

Naturally my opinion regarding these questions is purely that of a layman and should be valued as such. I am convinced, however, that in this field science can show the way to possibilities for the blind as yet hardly comprehended, provided the very considerable sums of money required for the work of development can be procured.

As soon as an apparatus suitable for practical application has been constructed, systematic tests with children should be made. It is a well-known fact that the capacity of the child for creating reflexes is far greater than that of the adult, and a child should therefore be able to get as near to acquiring artificial sight as is actually possible. If tests are made with adults only, one should to some extent consider the limited capacity of the adult for pro-

ducing reactions, when the results obtained are being judged.

Personally I do not believe that our generation will be able to use to the full the devices for the orientation of the blind that it may be possible to develop according to the principle discussed above, even supposing that appliances suitable for practical application were to become available immediately.

This short survey does not in any way claim to be exhaustive or based on expert knowledge. As I said in the beginning, blindness is, above all, a technical handicap, and the psychological complications connected with blindness can only be surmounted satisfactorily to the extent that the technical problem can be removed. My short address aims at stimulating a discussion of this fundamental problem, which is perhaps the most important one for all those who are working to restore the blind to normal life.

CURRENT STATUS OF EFFORTS TO DESIGN READING MACHINES

Dr. Walter Blum, Nurnberg, Germany

It is a special honor for me to report to you about the development of reading machines for the blind. While Braille is invaluable to the blind, talking books in various forms such as disc records and magnetic tape have become indispensable. But the availability of such embossed and mechanically recorded literature cannot silence the longing for a machine that would allow the blind themselves to read normal print. Numerous and expensive experiments have been made since 1912 when Fournier d'Albe demonstrated his "Optophon." Such experiments were conducted in many countries with a view to constructing a reading machine in a useable form that would not be too expensive.

I am sorry that I have insufficient time at my disposal to tell you of the ingenious experiments conducted and proposals made during those early years, in spite of my interest in them.

I intend to briefly describe the current status of research and development in this area. We recognize reading machines as falling into two categories, those for reading ordinary print, and those for reading other forms of type such as teletype, braille, etc. I shall concentrate mainly on the development of reading machines for printed letters. However, I shall also touch upon other types of reading machines later on.

The reading machine for ordinary print type should be able to reproduce printed type in a form recognizable to the blind reader. Furthermore, the machine should be able to distinguish all characters in all type faces in the optical range without error. The machine should provide the text in a way that will enable the blind reader to recognize it easily and without becoming tired.

With the machine the blind should be able to read as quickly as normal people. In addition the machine must be trouble-free and embody a method for easy location and retention of the printed lines.

All these facts show the difficulties which must be overcome if such a machine is to provide a solution to the reading problems of the blind. One of the greatest difficulties is that the machine should not be too expensive.

A reading machine, regardless of type, must have the following main parts:

1. Scanner head, which picks up the letters.
2. Mechanical device for manually or automatically advancing the scanning head from letter to letter and line to line.
3. A device for identifying the scanned letters.
4. A device for translating the identified letter into a tactual or audible form.

All experiments towards the solution of this problem commence with the use of a scanner with a light sensitive organ for converting the optical diagram, that is, changing the printed letter into an electrical diagram. They differ substantially in the manner by which they overcome this problem, and in the manner of allowing identification by the blind user by touch or sound.

We are aware of machines that produce the printed letter in:

1. A tactile manner as follows:
 - a. as geometric-like relief
 - b. as an electrical impulse providing a geometric-like impression
 - c. in braille letters
2. An audible manner as follows:
 - a. providing tone impressions, that is, each letter is represented by a characteristic tone. Some such machines can provide a "tone impression" formed by a combination of several tones.
 - b. as spoken letter or spoken word.

There is no doubt that the machines which offer to the blind a relief, an impulse picture or a tone impression would allow speedier reading, as they do not have to identify the individual letter, this being done by the blind reader himself. The inventors of these machines believe that this could easily be done by the blind reader. Should this proposition be correct, it would be a way to realize the simplest reading machine. But, and this is a pity, practical trials with such machines, to the best of my knowledge, have not proven satisfactory. To achieve greater success we must study the technical principles embodied in a machine of this type.

Fournier d'Albe, the first inventor of such reading machines, in his "Optophon" lighted the printed letters by a rotating disc with drilled holes in the manner of the well-known Nipkow disc. The light, reflected by the printed letters, is changed into tones by a selenium-cell. The form of conversion is such that a different tone is produced for each letter of the alphabet. Because the tones are in no way characteristic of the sound of the spoken letter, it is very difficult for the blind to read in this manner and not become tired in a short time. Similar experiments have been undertaken by F. C. Brown, Rosing. With modern advances in electronics Zworykin and Flory have in recent years constructed a pick-up stylus that is moved manually by the blind reader along the printed line. In this way the printed letter is illuminated from bottom to top by an oscillating mirror throwing a light beam to a number of points across the width of the letter. The reflected beam of light is changed into electrical tones so that a special frequency will occur when the beam begins its vertical motion at the base of the letter. The farther up the beam moves the higher the tone becomes. The tone increases when the beam strikes the black area of the letter. This ingenious machine is simple to handle, fool-proof and compact. However field tests indicated the impracticability of this machine. It is too difficult for the blind reader to identify the acoustical letter diagrams. Specially selected blind people could, even after long training, read only a few letters very slowly, and became tired within a short time.

For changing the printed letter into a similar relief form or electrical impulse diagram, special plates are used. The surface of these plates consists of innumerable tiny pieces arranged mosaic fashion that may be raised to become perceptible by touch or stimulated by electrical impulse. The movement or electrical stimulation of the pieces is controlled by a device which has light sensitive cells equal in number to the pieces comprising the plate's surface. The pieces so stimulated can be detected with the finger, but machines have also been designed for application to other sensitive areas of the skin such as the forehead or chest. A great number of machines of this type have been built, for instance in France by Thoms, Georges and Pierre Fournier, Saudemont-St. Quentin; in the United States by N  umburg; in Russia by Rosnig; in Germany by Mihaly, Ernst, Riess, Finsenhagen, and so on.

Unfortunately none of these expensive experiments resulted in the complete solution to the problem. Although one might anticipate that relief forms of similar shape to printed letters or stimulus pictures would be easily identifiable, it was found that

this is not so. This identification has proved too difficult for the blind.

This knowledge is not new to us for the invention of braille was based upon such awareness following many attempts to devise a reading process using embossed or cut-out letters of standard shape. A hundred years ago, Louis Braille, in compiling his ingenious code, recognized that a few simple signs in a comparatively small area are prime requirements of a touch reading system. To overcome the difficulties of identification the reading machine should offer the blind the letter either in braille or in spoken words. These two methods alone can guarantee easy and quick reading. Reproduction in braille has fewer technical difficulties. Furthermore finger reading will leave the blind reader's ears free for another purpose. For instance one can visualize occasions when a blind lawyer has to read his papers and listen to the barrister at the same time. However, it is important to remember that braille is read by only about 30 percent of the blind. Acoustical reproduction in the form of a musical language would be the best, for all the blind could recognize it easily. Reproduction should obviously be as correct as possible. Such mechanical reproduction can only provide good results with languages in which writing and speaking do not differ too much. Therefore, even assuming that the printed letter can be reproduced syllable by syllable, it will, especially for the English language, not be very easy to get a good reproduction. I do not know any solution to this problem. However, I am able to give you some information about reproduction in the German language. In my own experience, I have found it to obtain a fine reproduction. Machine language is a monotone and the ear needs some time to accommodate itself.

To convert printed letters into braille or into a mechanical language the reading machine must identify the optically picked up letters and convert them accordingly. As far as I know there are today three methods of picking up and identifying the letter.

1. The so-called "impulse method." This method has been developed in the United States by Zworykin, Flory, Price and Shepard. The machine developed by Shepard could be put to practical use.

2. A similar method has been developed by Schutkowski in Germany, who continues to conduct research in this area. So far a useable machine has not been produced.

3. The method of "characteristic areas."

I myself have tried to produce a machine of this type, but my experiments have not produced a useable machine.

Let us examine each of these methods.

Shepard's machine, working on the "impulse method," has the following principle: The letter is scanned by a number of fine light-beams in a vertical direction and different zones. The scanning beams are produced by a special cathode-ray tube. The impulses made by the different beams while scanning are counted electronically. Simultaneously the information as to which beam caused which impulse is stored. For example, let us take the capital E. The beam, scanning the vertical bar of the letter, produces one single black impulse. Meanwhile the scanning beams on the right side produce three black impulses. The electrical circuit thus identifies and reproduces the letter E. Other letters are formed in a similar fashion. The special problems of the impulse method are:

1. Some letters when scanned produce a similar or nearly similar diagram, for instance, E, F, I, L, and T. These letters are very frequently used. A machine manufactured by the Intelligence Machine Research Corporation, in Arlington, Virginia, will identify 98 percent of all letters. To identify 99.8 percent of all letters the complications of construction are increased many times. For this reason such a machine would be too expensive. A reader can recognize the meaning of a sentence quite well if he can correctly identify only 95 percent of the letters.

In order to reduce construction cost it will be advisable to provide only such range as is required to ensure easy recognition.

2. The comparatively short life of some cathode-ray tubes presents certain problems.

3. Complications and costs for constructing a machine that will identify capitalized and uncapitalized letters and different type faces are very high.

The advantages of the impulse method are:

1. The quality of printing and paper are unimportant except that letters should not be visible on the reverse side of the page.

2. A slight deviation of the line is unimportant up to a maximum of half the height of the letter.

3. The reading speed is controlled solely by the reproduction stage of the machine, the electronic stages performing instantly.

A scanner and identifier for the impulse method seem to have been developed in a useable form in the United States. The necessary productions costs are still very high. The machine, developed for sampling of punched cards, addresses, etc., is being used for such purposes. Some years will elapse before a suitable reading machine for the blind is available.

I would like to speak now about a similar method being used by Schutkowski which picks up the printed letter by an optical

system and co-ordinates the picture with a matrix. Behind the matrix is a light sensitive organ which causes impulses when the picture of the printed letters and the matrix letters fall together.

The matrix letters are stored on a drum or tape. To identify a letter, the drum or tape is moved rapidly in front of the optical picture. When conformity occurs an impulse causes the reproduction stage to come into operation, so that the appropriate letter is recognizable by touch or sound. The matrix allows the light to pass through the black areas of the letter but not the white areas. It may be called a negative matrix. Naturally a positive matrix works in reverse fashion. This principle has been extensively explored by Schutkowski. While doing so, he evolved the principle of multi-projection.

A lens cut with facets projects the printed letter simultaneously to each matrix letter. For this, all matrixes are assembled in one plate. Behind each single matrix there is a photo-cell. The photo-cell is activated only when conformity in picture and matrix occurs. The photo-cell motivates the reproduction stage, making the letter recognizable by touch or sound. The advantage of this principle is the elimination of unnecessary mechanisms.

A further improvement of this method is Schutkowski's differential camera. With its assistance minor differences in the shape of almost similar letters may be detected. The principle of the differential camera is the projection of the same letter on two matrix plates. Both plates have the same matrix. The currents from both photo-cells, which are arranged behind the matrix plates, flow in opposite directions. By this method greater accuracy is assured in the activation of the reproduction stage. A difficulty of the congruity method is the need for special matrixes for each character and size. Schutkowski intends to locate in one tape several alphabets in different type faces. Schutkowski has made intensive tests in his laboratory using capital letters. His machine cannot yet be put to practical use.

Research on a machine which uses what I term the method of "characteristic areas" of letters has so far not achieved successful results. The principles have been tried out, but there are still many difficulties to be overcome. In principle it involves a further development of the congruity method described in the preceding paragraph. The picture of the letter is projected on a matrix; however, in this instance the matrix consists not of an exact reproduction of the letter, but rather the characteristic pattern embodying the main features of the actual letter shape. Our objective should be to produce a matrix which would be suitable for use with all type faces.

Positive and negative matrixes of the characteristic areas are used at the same time. In this manner definite identification will be assured. The matrixes are located on a tape or drum. By means of a differential circuit for both electron-multipliers, high sensitivity and independence of the quality of the paper have been reached.

As a result of precise geometric measurement of the characteristic features of letters and numerals it has been possible to develop suitable matrixes. By means of supplementary areas they were aligned photo-electrically. Both photo-electric cells work in a bridge circuit and control the transmitter. The transmitter (or reproduction stage) will provide tactual or auditory recognition as with other methods already described. Difficulties may occur in producing English text. Further difficulties of this method may result from the necessity for precise alignment and movement of the matrixes. The problems of recognition by the reader are similar for all reading machines mentioned above. To reproduce the printed letter for the blind the eye has to be substituted by another organ. In reading with the eye the reader picks up a number of impulses side by side (separate letters forming a word) and combines them into a single impression. The ear is not able to work in the same manner. Single sounds reaching the ear are detected in rotation. Thus the recognition of separate letters as words is a slower process with the ear. The quickest and most exact equivalent to the printed word is the spoken word. Mechanical language speaks sound after sound without any expression. Therefore mechanical language sounds monotonous. Although the blind person who reads by ear is required to adapt himself to the mechanical voice, this type of reading machine might ultimately prove to be the best answer to the total question. Trials already conducted in the German language serve to justify the attention which the matter is receiving. I am convinced that the technical problems of producing a machine which uses mechanical language can be overcome. Braille rather than auditory reproduction can, however, be more easily achieved. The comparative simplicity of construction and cheapness cause me to believe that for the present the conversion of print into braille should be our objective. This method, as stated earlier, relieves the ear to pick up other impressions. Later on it may be possible to reproduce printed text as spoken text.

Before concluding I would like briefly to mention a special reading machine which is developed specifically to aid blind teletype operators. It is essential that such operators be provided with a means of reading the message. An electronically and

mechanically operated reading machine has therefore been developed which converts into braille letters punched out on a paper tape. This machine, which is now being tested, is portable, being approximately the size of a typewriter.

Summing up I should like to say that all the details surrounding the development of reading machines have not yet been solved. Nevertheless, the various principles I have described on which experimentation continues, carry good prospects of success. But many difficulties still exist and, despite over-optimistic reports appearing in the press, our goal is still some way off. However, the high aim of enabling all blind people to benefit directly from the great gifts of literature, justifies all our efforts.

SOUND RECORDING DEVELOPMENTS

M. Robert Barnett, Executive Director, American Foundation for the Blind; American Foundation for Overseas Blind, New York, New York, United States

There is probably no service to the blind of any country of a technical nature which is more eagerly sought after, more easily attainable, and at the same time more demanding of excellence and efficiency in its undertaking than the providing of literature through the medium of sound. In twenty years of experience with this type of service, which the English-speaking world has come to know as the "Talking Book," the blind themselves and the agencies rendering the service have proved that those who pioneered in its original development were justified in their fight to overcome the obstacles which confronted them at the outset.

It is well that we take a moment to restate the original convictions which gave those pioneers their inspiration, in order to examine whether a service which is now taken so for granted in the English-speaking countries is really worth its cost to society and whether it has really opened a world of literature to the blind which otherwise might not have come about. Most of us are generally familiar with the story of the struggle to bring educational material to the blind through touch reading of embossed print. We look back with awe upon the era of great leaders who made reading and writing possible through the many technical forms which embossed literature originally included, and find a degree of satisfaction with human achievement in the eventual uniformity of the code known as "braille." To my mind, the creation of a system of reading and writing through raised print is perhaps the greatest single benefit ever accomplished on behalf of the blind and, as Miss Helen Keller herself has said, it has been to the blind what Gutenberg and his printing press have been to the world at large.

Despite the recognized value of braille reading, however, it became evident that not all blind persons would find that braille reading would be useful to them. Many persons who lose their sight, find that their ability to learn braille is restricted. Unfortunately, there are no scientific surveys to indicate just what percentage of any blind population can use braille readily, but even the most generous estimates place the number who can use it at not more than 25%. It is obvious that the blind are a cross section of the world's population, and since not everyone in the world at any one time does read, then it follows that we cannot look forward as an ideal to any system through which all those who are blind at any one time would want to read even if provision is made for it. It became evident, however, that a much larger percentage of blind persons than those who could use braille were and still are in need of literature for both educational and recreational purposes.

The existence in the world twenty to twenty-five years ago of the device which was generally called the "gramophone" suggested itself to those concerned with the problem of literature for the blind as the possible answer. History shows that efforts to adapt this obvious instrument to audible reading began almost simultaneously in both England and the United States. The early efforts of the technicians would seem to us today to be somewhat crude and inadequate, but such is the case with all first efforts to accomplish technical achievements, and we today often smile when we see photographs of the first automobiles, airplanes, and even the gramophone of that day. The development by commercial recording interests, however, of recording techniques which reduced the weight of discs and at the same time increased the number of minutes of playing time on a disc gave the development of recorded literature its first great impetus.

Yes, the English-speaking countries have moved rather rapidly in the development of their technical knowledge about recorded literature, and the numbers of blind persons who are enjoying literature through this medium already have grown beyond the number which the original pioneers thought possible. In my own country, if you will forgive me, there are today approximately 40,000 blind persons receiving books and other materials regularly and in rather copious quantities, and we expect that the number will double in the next ten to twenty years. Unfortunately, however, there are but a few instances outside of the English-speaking countries where progress in this direction has been noticeably successful. In France, there is the nucleus of a recorded literature service operated by the Union of the French War-Blinded, but the service has not yet been extended to civilian

blind persons. In Scandinavia, there has been much investigation and some small beginnings, but not yet of sufficient scope to warrant calling it a library of recorded literature. In Germany, there have been intensive technical experimentations, but only planning with regard to actual distribution of books. In Japan, the nucleus of a library service of this type has been started but is greatly in need of expansion. Throughout the rest of the far east, the near and middle east and South and Central America, there are only occasional efforts, usually on the part of an individual, to supply recorded materials to exceedingly small groups of readers.

The lack of knowledge about recorded literature and lack of introduction of it in most of the world is by no means an indication of lack of interest. General awareness of its possibilities has spread like a conflagration all over the world, and leaders of organized programs for the blind have demonstrated for years an intense desire to introduce it. The question before us now, therefore, is how and in what form.

I shall divide the rest of this presentation into two parts. The first, will be an effort to summarize the essential technical points which have been learned about the use of sound recording in our field; and the second, will be to analyze the administrative and financial problems which must be anticipated in the production and distribution of recorded books.

If the scientists who first developed the device which we have come to know as the "long playing" record had rested at that time and if they had not produced intriguing new types of recording techniques, I am confident that recorded books in the form of round, long playing discs to be played on devices similar to the gramophone would now be more generally in use than in just the English-speaking countries. It may seem paradoxical to say so but this is a case where technical advances have tended to retard development. There are many technical, administrative and financial disadvantage to the disc type of recording, and it is these disadvantages, which I will specify later, that led scientists to try to find forms of recording which theoretically would do away with those disadvantages. By and large, however, even with all its disadvantages, the experience of the English-speaking countries has proved that with adequate funds, a highly satisfactory Talking Book service to the blind can be maintained. Despite all of the new technical knowledge which has come into this field, no new device has yet presented itself that sufficiently overcomes the disadvantages of disc recording to warrant a change in technical policy in the United Kingdom and the United States. The very emergence of new technical media has tended

to retard the rate of expansion in those countries, and has definitely retarded the introduction of this program in other countries since we all have been waiting to see whether there might not be some more attractive technical system into which we should be putting our investments.

The present medium of supplying recorded material to the blind has several main disadvantages. They are as follows:

1. the problem of needle replacement in the "pick-up" or "playing arm" and the difficulty encountered in handling this apparatus, particularly in older age groups;
2. the problem of weight and bulk in shipping, handling and storage of records, the latter a real problem to most librarians, and the replacement of records damaged through the use of worn or inferior needles; and
3. the process of duplicating records through the pressing technique does not lend itself readily to other than large quantity output, meaning that small numbers of copies are exceedingly expensive.

The experience in the United States is showing further that as reproducers are purchased and distributed in greater quantities, there is a corresponding increase in the cost of maintenance of these reproducers. Of course, it is obvious that any kind of reproducer, regardless of its mechanical and electrical system, will tend to become defective with use and in need of repair.

One way of summarizing the problems incident to disc recording is to indicate what all of us have been seeking with regard to the specifications of an ideal technical medium. As generally agreed in discussions among members of the Technical Subcommittee of the World Council for the Welfare of the Blind, the ideal medium would be one that would be capable of recording for approximately twelve or more hours within one recording unit, such as a cassette; that would reproduce with a frequency response sufficiently broad to ensure "high fidelity" reproduction; that would not require the use of a needle, which inherently causes damage through friction and costly replacement of needles and worn recordings; that would be easily operable by blind persons, many of whom are elderly and not dextrous; the reproducer for which would be lightweight and small, complete with its own amplifier, speaker and/or earphones; the recordings for which could be multiplied either in small quantities or in large quantities at no great variation in unit cost; and, the cost of recording equipment, reproducing units and records for which would be relatively low.

At the time the Executive Committee of the World Council met at Bussum in 1952, there already was known to most of us

that there were many prototypes of technical devices already developed which appeared to approach the kind of instrument for which we have been searching. Those of us who had had the experience in the larger countries continued to caution the representatives of smaller countries that they should not undertake to start a library of recordings using standard long playing discs, if, within a few short months or years, a new and much more acceptable system would be available. It also was the hope of the Executive Committee and the Technical Subcommittee that all countries might agree upon the same system so that there would be uniformity from country to country. If uniformity could be achieved, it is obvious to all that the blind would benefit from the ease of exchange of books made with the same recording technique and for reproducing on the same type of instrument. It was generally agreed at that time, 1952, that the smaller countries would attempt to delay the start of library programs of this type until the experimentation being carried on elsewhere would have reached a stage where analysis of tangible products could be made, and it was believed that a waiting period of two years would be all that was required.

Two years passed, and a review of progress made by the Technical Subcommittee just two months ago at a meeting in London, showed that our dreams of a perfect Talking Book technique are still only dreams. It is not my purpose this morning to detail in technical language all of the studies which have been completed by the Royal National Institute for the Blind, the American Foundation for the Blind, and interests inside and outside our field in those countries, and also in Scandinavia, Germany and France. I am not personally qualified, and could only read to you the findings of technicians who have been assisting us. Most of you in this audience also are not technically qualified and it would be unfair to you to dwell upon the fine points of recording media. Any among you who would like to know more of the technical features of current experimentations may readily find out at another time by contacting any of us whose agencies and technicians have been studying the matter. In summary, your World Council representatives have become thoroughly acquainted with such recording devices as the cassette-type of magnetic tape recording, developed by the British technicians; the long playing, cassette-type needle-tape device developed by German technicians, carrying the commercial name of "Tefifon"; the cassette-type optical recording, film-type instrument still being developed by other German technicians with American support; technical devices for increasing playing time on discs; and other lesser instruments too numerous to mention here.

In England and the United States, where the best knowledge of all technicians in those countries has been available to us, we have lately come to the decision that our governments must continue for an indefinite period of time to expand their libraries with the present form of highly-improved disc recordings. We have withdrawn from the rest of you any influence which we may have been exerting to ask you to delay in the eventual has not made a final recommendation which would guide the hope of international uniformity. The Technical Subcommittee has not made a final recommendation which would guide the thinking of those of you to whom this subject may be new. My personal opinion is that any of you who wish to begin recorded literature services might as well delay no longer, unless in your own judgment, you believe that the greatest good to the greatest number ultimately would be served by waiting for further technical advancements. My personal advice would be to select, with the aid of a manufacturer, the kind of recording device which seems to most nearly achieve the ideal expressed above, but one which can be produced and delivered by such a manufacturer at low cost for both reproducers and recordings. Since almost all of the tape-type recording devices require some understanding of more complicated operation on the part of the user, and since almost everyone is at least generally familiar with the gramophone, I think that it might be wiser, even in the modern age, to adopt the disc type of recording as a beginning device.

The second part of my report about recorded literature services, which was indicated to be of an administrative and financial nature, will serve to further qualify the foregoing personal opinion. It is true that most of us have been pre-occupied with the technical phases of such service, since it is fundamentally necessary that we be able to supply blind people, or enable blind people to secure for themselves, a device which will actually play back books in an acceptable manner with regard to ease of operation and pleasure of listening. But even though one of us may have found such an acceptable device, it is almost the least of the problems involved in the maintenance of an adequate library service. Library service for a national area, or common-language area, must have the following ingredients:

1. A place for the recording of the books, generally called a studio.
2. Equipment with which to accomplish the recording, involving such things as microphones, tape machines and "cutting heads."

3. A place to multiply the original recordings, either duplicated on tapes or on pressed records.
4. Individuals to read from the printed book, meaning individuals who will be dependable in attendance and artistically as well as temperamentally suited to what is a task requiring considerable skill and patience.
5. A plan and place for the storing of books or other materials, essentially the same as any other library, but one which inherently will require more space than printed books and more manual labor in handling of books which are sent out and which are returned.
6. A plan and provision for distribution to the homes of blind people of both machines and recordings, which inevitably will involve delivery by library personnel by hand, and hopefully, delivery and return of recordings by the postal service.
7. A plan and procedure for the selection of materials to be recorded, which must not be done on a thoughtless basis, must not be dominated by the subjective reading interests of those in charge, but rather designed to supply materials most generally of interest to the cross section of the population who are blind.
8. A plan for the maintenance of equipment in the homes of blind people, providing for the repair of reproducers, replacement of needles (if disc recording is employed), either through information to blind users of local technical facilities or through maintenance of a central depot for repair and maintenance purposes.
9. To repeat a point already stressed before this list began, a manufacturing source of reproducers which will be low in cost to either the blind individual or to the sponsoring agency who will supply them to those who cannot buy them, and which are readily available on the market.
10. Rather significant sums of money from either government or private sources for the original outfitting of all of the foregoing, but with assurance of continued financial support if the program is to live and grow satisfactorily. Even with the volunteer help of friendly people, in both the technical and artistic fields, this kind of service cannot be completely operated without the purchase of costly materials and payment for professional supervision and operation.

In closing, to repeat my opening thought, we are convinced that almost no service ever designed for the blind can serve as many of the blind of any country so well as that of providing them with an abundance of reading material through the medium of sound. We are convinced that it is attainable, with all of the

ingredients quite possible of achievement, provided funds are available. However, it is a type of service which probably requires more excellence and efficiency, more painstaking effort and skillful planning than any other new service which many of you would like to undertake. Your Committee, or those of us who have had experience in many of the other countries will be very happy to assist you in achieving such a worthwhile additional service to your blind people.

SOLID DOT BRAILLE AND RELATED MATTERS

J. C. Colligan, Secretary General, Royal National Institute for the Blind, London, England

To consider the merits of any new process one must take a standard of comparison, and the standard of comparison which I wish to take in respect of Solid Dot Braille is that the generally accepted method of producing braille books or magazines is that of embossing a folded zinc sheet on a power-driven embossing machine and printing from that sheet on a platen printing press editions of books or magazines up to 100 copies. Larger editions of periodicals are usually printed on a high-speed rotary press running at about 4,000 revolutions per hour. By either of these processes braille may be embossed either interpointed or interlined. Where only single copies of books are required manually-operated machines are satisfactory, but in other respects the existing processes have many disadvantages:

Firstly, the Manila paper used for embossing is expensive, as its substance must be such that it retains the dot formation under tactual pressure for a reasonable period. Various attempts, some of which have been successful, have been made to harden the paper after embossing, but this involves extra cost and factory space.

Secondly, the zinc used for the matrices is expensive and its storage, in order to provide "reprints," presents a problem.

Thirdly, interpoint braille involves maintaining the power-operated machines in perfect registration, as a misplaced dot will damage or obliterate the dot on the reverse side.

For some considerable time past the Royal National Institute for the Blind has been seeking an answer to these problems and has now evolved a new method of producing braille which has been tested by between 4,000 and 5,000 braille readers, 80% of whom have reported as preferring the new type of braille to the old.

Our Solid Dot Braille machine, as we call it, is now at the point where we are constructing the first production model and by 1955 we shall be using it for the printing of many of our magazines and periodicals. The advantages of the new system are:

1. It is very much cheaper on account of the different type of paper which is used and also on account of the high speed of its production.
2. It is very much more durable in that the paper, though thinner, is tougher than ordinary Manila paper and the dots are incompressible, at the same time being of equal shape and height.
3. It is very much less bulky.

The first stage in the production of Solid Dot Braille is the preparation on a slightly modified transcribing machine of a thin stencil which can be either of plastic, zinc, or impregnated paper. Alternatively, there is a scanning device whereby a hand-written embossed braille master page may be produced automatically on to a stencil in about three minutes. Electro-mechanical sensing equipment is used, and equipment is being designed to sense at least two full pages of braille at 32 lines to the page and punch the stencils automatically at the same time.

Stencils produced by either of the above methods are then mounted on to the printing machine which is designed to take 16 stencils, so that 8 double-sided pages of braille can be produced at a time. If necessary the machine can be constructed to print from a different number of stencils, but it is thought that 16 is an optimum number for magazine production.

At the end of the printing machine a zig-zag or "interfold" folding device is incorporated, thus saving collation of individual sheets and delivering collated units of 16 pages.

Mounted inside the two banks of stencil carriers (each consisting of two drums) and facing each other, are two sets of grooved rollers, underneath which are ink pick-up rollers, which revolve in printing ink troughs, which are fed automatically from a separate bulk supply. The two grooved sets of rollers rotate in the opposite direction to and against the concave surfaces of the stencils. Fully automatic blending of the ink is part of the function of the bulk supply unit.

The grooved rollers are under pressure when printing and, as the outer covering is of rubber, slight deformation takes place, which exerts a pumping and wiping action. The combined action forces the ink through the holes of the stencils and deposits the ink on the paper. The freshly-printed paper web runs upwards over specially-designed rollers which grip the unprinted edges and the centre portion of the web and do not allow the dots to come in contact with the rollers.

The web, after leaving the rollers vertically, is then taken horizontally through a chamber mounted over the printing machine. This chamber, in which there are electrically-heated elements and hot air blowers, is designed to accommodate four loops

of the web, thus enabling a high speed of curing of the plastic dots to be effected while keeping the size of the chamber down to the minimum.

The equipment is being designed to run at over 100 feet per minute but it is hoped to increase this speed further. The machine will be approximately 20-22 feet long, 4 feet wide and 8 feet high. The approximate weight will be around 4 tons. The width includes the space taken up by the paper-web carrier and a large reel of paper.

There will also be a simple printing unit for the printing of the titles, pages and dates of the magazines.

The plastic ink used in the formation of the dots has, after heat treatment, good adhesion and strength together with a smooth surface. Aging tests have proved that the hardened dot does not deteriorate.

Until the first production model is completed it is not possible to give a final accurate estimate of the cost of the plant required, but it may well be in the region of £10,000; nor until we get into routine braille production can we give any precise estimate of the savings involved. But we can safely state that from our own point of view saving in production costs will be enormous, certainly amounting to 50% and perhaps even two-thirds of the production costs under the existing system, together with an increase in speed of up to three times that of existing machines and a reduction in the size of braille books to as little as one-third of their present thickness. Solid Dot Braille will increase enormously the amount and scope of embossed literature for the blind, and enable organisations working for the benefit of blind people to allow those whom they exist to serve to enter to a greater degree than ever before the fullness and the riches of literature.

There is, however, another development in the production of braille, and indeed of all embossed or relief literature for the blind which, I think, will be of interest to practically every delegate assembled at this Conference.

This is the printing of braille, Moon, relief maps, diagrams and similar devices through a vacuum-forming moulding machine which permits highly-detailed relief images to be produced on plastic sheeting rather than paper; definition is excellent and the height of relief which can be obtained is as much as $7\frac{1}{2}$ ". The material will stand a great deal of handling. It is washable and reusable, if required; it is no more inflammable than ordinary paper, is not affected by temperatures lower than boiling point, and can easily and simply be bound into volumes. Forming four sheets of standard-size braille paper at one operation, the output of the machine is as much as 400 sheets per hour.

The particular advantage in the production of braille or Moon

literature is that reproductions can be made from existing paper sheets and all that is required is a braille paper master which can be either specially handwritten for the purpose or which can be taken from some existing book or periodical. A long-felt want in educational equipment has been an adequate supply of relief maps and diagrams for use in our schools and colleges. Those of the commercial type are expensive to produce, unwieldy to handle, and quite unsuitable for binding into volumes. Their preparation, as you all know, entails a very considerable expenditure of time in making the matrices. In the production of Moon type the advantages of this new process are even more marked. Hitherto Moon type has had to be set up by hand as in letter press, and is ultimately broken up, as in normal printing practice, but now when a volume in Moon, for which a small demand has been anticipated, suddenly becomes popular there is no need to reset the type, for further printings may be taken from the original volume.

The vacuum-forming machine is a commercial product and may be purchased with comparatively little delay at a cost of between £350 and £400 sterling. The material which is being used by the Royal National Institute for the Blind for printing braille and Moon is a cellastine plastic sheet 3/1000" thick. For maps and diagrams a thicker material up to a thickness of 20/1000" is being used depending on the area of the subject matter and the depth of its relief. The machine is capable of dealing satisfactorily with plastic sheets up to a thickness of 3/16". Plastic sheeting in England is more expensive than the Manila paper which we now use for braille production and the cost of 3/1000" cellastine is approximately 3 times that of Manila paper but it must be remembered that though the cost of this material is higher, the saving effected on transcription is enormous and in the case of maps an even greater saving can be effected as cheap plaster casts can be used.

Fortunately we have been able to arrange for those delegates who are interested in this machine to see it demonstrated in the Printing House of the American Foundation for Overseas Blind in the Rue Daru. Therefore, apart from exhibiting a number of examples of the work which we have already produced in London, I would suggest that delegates who are further interested in this process may care to see a demonstration of it by the manufacturers whose representative, thanks to the co-operation of our friends at the American Foundation for Overseas Blind, will be available to show it to you and to answer further questions.

SUMMARY OF TECHNICAL EFFORTS FOR IMPROVED PRODUCTION OF BRAILLE

Edward J. Waterhouse, Director, Perkins Institution and Massachusetts School for the Blind, Watertown, Massachusetts, United States

Since Mr. J. C. Colligan of the United Kingdom has discussed braille technical developments in his country, particularly Solid Dot Braille, my remarks deal mainly with current thinking in the United States.

Most of the ideas I am presenting are not new. A number of people have shared in the shaping of them, and have been discussing them for at least two decades together with many other ideas not presently active. The ones mentioned here are those currently alive in the United States, which are expected to produce new equipment and new techniques in the immediate future.

A powerful impetus to this program was provided during the last few months by the Library of Congress which, as you probably know, is an agency of the United States Government, and is the biggest purchaser of braille and talking books in the world. The Library commissioned the American Printing House for the Blind, a private braille press located in Louisville, Kentucky, to direct a research and development program which sought to improve the Library services to braille readers. The immediate result of this program has been the pooling of ideas by all interested agencies. It would be almost impossible to discuss the topic assigned to me today without relating the present thinking and future plans of these research people, and my paper is inevitably, to a considerable degree, an entirely unofficial progress report on this program in which I am privileged to be a participant.

The Superintendent of the American Printing House, Mr. Finis E. Davis, assigned the direction of this project to his Production Manager, Mr. Virgil E. Zickel, who has devoted much time to it during the past few months and who will play a big part in future developments.

The co-operative aspects of this work deserve recognition. A planning conference was held in Louisville early in April, 1954, and was attended by representatives of the various presses which supply braille books to the Library of Congress. These are the Braille Institute of America, of Los Angeles, California; the Clovernook Printing House for the Blind, Cincinnati, Ohio; the Howe Press of Perkins Institution, Watertown, Massachusetts; and, of course, the American Printing House itself. Also present were representatives from the American Foundation for the Blind, the Canadian National Institute for the Blind, and the Royal National Institute for the Blind, the "big three" in welfare work among the English-speaking blind. Professor Dr. Carl Strehl was invited to attend or to send a representative from Marburg/Lahn.

but was regrettably unable to do so. The Librarian of Perkins Institution also attended to present the viewpoint of distributors of braille material.

Although several of the agencies represented have their own manufacturing plants and employ qualified engineering personnel, it was decided to seek the technical advice of several individual engineers of varied training and experience, and to consult the Battelle Memorial Institute, a research organization located in Columbus, Ohio, and the International Business Machines Corporation, whose worldwide industrial activities are perhaps better known than their outstanding contributions made on behalf of the blind and other handicapped groups. No attempt will be made in this paper to identify the particular contributions made by the various participants, except to point out that from the British representative we learned how much difference there is between our problems in the United States and those of the United Kingdom, though our goals are similar.

Our current thinking largely springs from a desire to provide braille readers with services far superior to those possible with existing equipment. While some improvements in speed and comfort to the readers and some reductions in cost to the producer might be obtained while adhering to the conventional and well-established techniques now in operation throughout the world, it is intended to explore radically new methods derived perhaps from modern industrial processes in the printing or other fields. By such means we hope to create conditions whereby a braille reader may obtain, with a minimum of delay, such titles as would normally be available to him if he could read print. While this goal may never be reached, a determined march is being made in this direction.

Before exploring the technical aspects further it seems desirable to mention that in the United States we plan, as a preliminary step and as a part of the technical research program, to study as scientifically as we may some of the psychological aspects of the touch-reading processes to determine whether changes are desirable in surface texture or in the size, shape, and spacing of the several dots. No consideration, of course, is to be given to changes in the braille code itself.

The key to technical braille development in the United States is the use of perforated paper tape. The technical reasons for selecting this over a variety of other possible media for transcribing manuscripts into embossed materials are too complex to relate here, but the choice has now been made after years of consideration. One reason is the existence of much equipment for handling paper tape and vast experience in a number of industries concerning its preparation and uses.

As a first step it is planned to produce an attachment for existing braille writers which will punch holes in the tape while the operator embosses the usual pattern of braille on a paper sheet. The paper copy will be used perhaps for proofreading; but if only one copy of a title is desired immediately it could be used for that purpose. Paper tape, however, after correction, will usually be the master copy to be used in production of the final product. Such tape is very cheap; it is small in bulk; it will not deteriorate in storage, and it can if desired be reproduced quickly and inexpensively on automatic machines which are already in existence.

The next step contemplated at present is the manufacture of an attachment to operate a conventional "stereograph" or "stereotype" machine to emboss metal plates, and which will be actuated automatically by the paper tape.

The development of these two pieces of equipment constitutes the first phase of the planned program. Before considering the second phase, a few words about their expected advantages seems desirable.

This new process eliminates the human stereograph operator. In the United States such an operator is very costly to train, while teaching a girl to operate a braille writer takes far less time, and consequently is less expensive. Perhaps because it is less fatiguing, a higher production per operator can be obtained from the use of braille writers than from stereograph equipment. This process would obviously be ideal for the volunteer braille transcriber whose already considerable contribution to our work would be multiplied many times in value. However, for certain types of material, such as periodicals or titles urgently needed, professional transcribers would still be needed, and their speed of production would be increased.

The tape-operated stereograph machines, at least in the initial stages, will be only semi-automatic. But a mechanic with no knowledge of braille could keep two, or perhaps more of them, going uninterruptedly. Anyone who has watched even the most expert stereograph operator knows how often the machine pauses for human or technical interruptions.

While this first part of the program seems to us to be quite worthwhile in itself, it is as a step to further developments that some of us value it most. The first phase would perhaps provide a satisfactory increase in a number of titles transcribed, but unless copies are available quickly on request, our problems are not solved. The costs of storage and printing forbid the production of editions large enough to take care of all unforeseen needs.

It is quite feasible, we believe, to manufacture equipment on the principle of addressograph machines which would automatically emboss single copies of a text, or indeed short or long runs of

a text, from the conventional zinc or aluminum plates, feeding in both the plates and the paper without human assistance. We believe, however, that this would be quite costly to make. Moreover, the expense of stockpiling zinc master plates is not a negligible item in over-all production costs. A swift and economic means of production from the paper-tape master copy is most desirable.

If a re-run of reasonable length is required after paper plates have been returned to scrap, the automatic stereograph could be used once more to produce new metal plates; but our experience shows that adequate re-runs, and in many cases first runs too, number only from one to five copies. To provide these and to eliminate both the stereographing machine and the embossing press we plan to develop a tape-operated, automatic-feed, inter-pointing braille-writer.

This, with the tape punching and the automatic stereograph, will, we think, make possible new services to braille readers which will be limited only by human factors and not by technical ones.

I wish to digress a moment to mention the pamphlet, which has been distributed to all delegates, describing the IBM Reading Machine. Hundreds of braille readers in the United States have had an opportunity to try out this experimental model, and practically every one of them likes the easy reading it provides. Whether it can be manufactured at a cost which will make widespread use practical remains to be seen, but this important experiment in a new type of braille "book" is noteworthy because it has been carried out at high expense as a public service project by a private industrial concern in the full knowledge that development costs could never be retrieved. Mr. Thomas J. Watson, the President of International Business Machines Corporation, deserves our sincere thanks. This type of equipment fits in ideally with the techniques outlined above. However, it should be emphasized that the IBM Reading Machine is no part of the Library of Congress' research program, and that further development at this time is not by any means assured.

If this program seems revolutionary, let me mention a few ideas which are theoretically quite feasible, which we have put on one side at least for the present. By combining techniques already known, it would be possible to make a machine which would read a print book and emboss it into correct, grade 2 braille. At the moment the cost of such development would be far beyond the reach of any of us.

However, some of the electronic computing machines already in use by research groups and large corporations can translate grade 1 braille into grade 2 braille accurately. It would take one hundred minutes to translate an average novel, and the rental of one of these computers, for even so short a time as this, is costly.

But time will change that. Ten years from now we may not have to teach grade 2 braille to transcribers. They will merely be asked to spell out the text on a tape-punching device, and allow an electronic brain to do the rest.

Other developments in industry and science are being watched carefully. Something may happen which will change all our program, but if not, it will probably develop upon the lines indicated above.

DISCUSSION

PROF. ALFARO PROA (MEXICO) asked for standardization in the terminology used for such devices as the talking book, etc. SR. BLANCO (SPAIN) deplored the search for reading machines, preferring the human voice to mechanical voices. Based on the information disclosed during the last few days, MR. GETLIFF (UNITED KINGDOM) foresaw a great future in the development and use of scientific aids for the blind. MR. ANDERSON (UNITED KINGDOM) asked for concentration on the development of achievable devices, rather than the seemingly impossible. PROF. MEZA (MEXICO) thanked Mr. Colligan and RNIB for its research in solid dot printing. In answer to a question MR. JARVIS (UNITED KINGDOM) stated that the new plastic-forming machine is more versatile than the Gestetner process. DR. STREHL (GERMANY) asked that all information on research being carried on in the various countries be sent to the World Council for dissemination and use in connection with international exhibitions of appliances. Replying to a question, COL. BAKER (CANADA) described the function of eye banks, but stressed that the corneal transplant operation allows only for replacement of the cornea. A cornea can be stored for a maximum of forty-eight hours before use.

RESOLUTION XII

Progress in scientific and technical fields has added greatly to the independence in life and outlook of the blind. This Assembly of the World Council for the Welfare of the Blind urges that future progress in these fields be closely followed and recommends that all international bodies and national governments be requested to give full material and financial support to future research projects recognized by the World Council for the Welfare of the Blind for furthering the development of physical, social, economic and scientific independence of the blind.

RESOLUTION XIII

The World Assembly of the World Council for the Welfare of the Blind recommends that steps be taken to establish an interna-

tional manual alphabet, amongst the Western countries in the first instance, and that a small international body of experts be constituted, composed of three deaf-blind persons and one sighted consultant, to determine which communication devices should be recommended for use by the deaf-blind.

FINAL SESSION

Friday, August 13, 1954

BUSINESS SESSION**Chairman, Col. E. A. Baker****Presentation of Report of Resolutions Committee and
Consideration of Proposed Resolutions: J. C. Colligan, Secretary,
Resolutions Committee****RESOLUTION I**

The World Assembly of the World Council for the Welfare of the Blind, recognizing the vital need of services for the prevention and cure of blindness and being eager for the emancipation of blind people throughout the globe and recognizing the fact that with the best of intentions the underdeveloped countries of the world will not, in the absence of expert technical guidance and financial resources, be able to further the prevention of preventable blindness or the cure of curable blindness or the welfare of the blind, recommends that the United Nations and the Specialized Agencies, including ILO, WHO, UNESCO, UNICEF, and the expanded program of Technical Assistance, be urged to extend free technical assistance and adequate financial aid to the underdeveloped countries to further their blind welfare activities, and that all nations be urged to vigorously pursue campaigns of public education concerning the needs of the blind and to give such needs adequate financial support.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by MR. BOULTER (United States), and carried unanimously.

RESOLUTION II

The World Assembly of the World Council for the Welfare of the Blind, convened in Paris August 13, 1954, adopts the following as a minimum definition of blindness and urges its acceptance as a minimum definition by all Governments and Organizations responsible for extending services to the blind:

- a) Total absence of sight, or
- b) Visual acuity not exceeding 3/60 or 10/200 (Snellen) in the better eye with correcting lenses, or
- c) Serious limitation in the field of vision, generally to not greater than 20 degrees.

The Council recognizes that many persons with sight in the better eye, after correction equal to 20/200 (or 6/60 in the metric system), are seriously handicapped visually, and the Council strongly urges that wherever possible, the definition of blindness be expanded to include all those with this degree of visual loss.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by MR. ALLEN (United States), and carried unanimously.

RESOLUTION III

The World Assembly of the World Council for the Welfare of the Blind resolves that inasmuch as the totally blind are in many cases more seriously handicapped than those other blind who retain residual vision, every effort be made to insure that whenever possible the totally blind shall be accorded such preferential services and assistance as may be required to assure them equal opportunity with all other categories of blind persons.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by MR. BARNETT (United States), and carried unanimously.

RESOLUTION IV

The World Assembly of the World Council for the Welfare of the Blind records its profound gratitude to UNESCO for the magnificent contribution that organization has made to the well-being of the world's blind people by effecting uniform usage in the field of orthographic braille and for its preliminary work in other areas of braille usage.

The Council welcomed the creation in July, 1952, of the World Braille Council, which has since operated as an advisory council to UNESCO, while also serving since August, 1953, as this Council's Consultative Committee on Braille.

The Council has noted that the provisional program and budget of UNESCO for 1955-56 does not provide further funds for the solution of world braille problems after December, 1955. It urges UNESCO's member nations to make additional funds available so that the work may continue to receive financial support from UNESCO.

Recognizing the great importance of this work the World Council for the Welfare of the Blind hereby resolves to accept parent responsibility for the World Braille Council and, within the limits of its budget and other commitments, to make funds available to that Council for continued work towards international acceptance of uniform practice in all areas of braille usage. In accepting this responsibility the Council notes with gratitude that the provisional program and budget of UNESCO for 1955-56 provides for a \$5,000 subvention for 1955 and for office and postal facilities.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by SR. PARDO OSPINA (Colombia), and carried unanimously.

RESOLUTION V

The World Assembly of the World Council for the Welfare of the Blind resolves that the Representative Members of each national delegation shall draw the attention of their respective governments to the important work carried out since 1949 in the field of world braille uniformity by UNESCO, and shall urge the said governments and national commissions to UNESCO to press for continued interest and financial support by UNESCO for the completion of this work so vital to the interests of the world's blind people.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by PROF. MEZA (Mexico), and carried unanimously.

RESOLUTION VI

The World Assembly of the World Council for the Welfare of the Blind, having received a report on the proceedings of the International Conference on Braille Music, recommends that necessary financial provisions be made for the engagement of Mr. H. V. Spanner, for a period of not less than one year, to produce, with such consultations as may be necessary, the revised Braille Music Manual and to carry out such other directives as given by the Conference.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), and seconded by MR. KEFAKIS (Greece).

In reply to a question from MR. SASSO (Italy) and SR. JOSE ESQUERRA (Spain), MR. BOULTER (United States) and PROF. MEZA (Mexico) confirmed the necessity of consultation with participating countries for a period of at least one year.

The resolution was then unanimously adopted.

RESOLUTION VII

The World Assembly of the World Council for the Welfare of the Blind and its Consultative Committee, the World Braille Council, are of the opinion that the present effort to secure uniformity in braille music notation should be reasonably completed before a corresponding effort is made to secure unification in mathematical and scientific notations, but that the necessary preparatory work by correspondence should be encouraged in the meantime. They note with satisfaction that various national committees and individuals are formulating proposals which will be of value when the time comes for collective international consideration.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by MR. ALLEN (United States), and carried unanimously.

RESOLUTION VIII

The World Assembly of the World Council for the Welfare of the Blind resolves that, in collaboration with international leprosy organizations, the Council should investigate the extent of blindness amongst lepers and should advise on means by which organizations for the blind could assist the rehabilitation and resettlement of blind persons cured of leprosy.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by MR. IWAHASHI (Japan), and carried unanimously.

RESOLUTION IX

The World Council for the Welfare of the Blind believes that the fundamental training and readjustment of indigenous rural populations should be primarily effected with due regard to their family and community backgrounds and, in the case of the newly-blind adults, to their past employments (usually as small-holders and village craftsmen, and, in the case of women, as domestic rural workers), by providing training centers for this specific purpose, instead of concentrating them in cities and towns to be employed in sheltered workshops.

The Council therefore recommends public and private authorities in such areas seriously to consider the Pilot Scheme, known as the Shamba Training Scheme, at present being conducted by the Uganda Foundation for the Blind, working in co-operation with the British Empire Society for the Blind, the object of which is to provide adaptive training to blind men and women Africans in simple, practical agricultural pursuits in familiar surroundings.

The Council suggests that in such areas, where road access makes it possible, Red Cross or other workers might be organized to do home visiting chiefly for the purpose of instructing parents how to care for young blind children.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by DR. VAN SCHALKWIJK (South Africa), and carried unanimously.

RESOLUTION X

The World Assembly of the World Council for the Welfare of the Blind resolves that special economic provision should be made for all blind persons, while insuring that the incentive to work and to contribute in other ways to the economic and social life of the community is in no way impaired. Each nation should therefore provide its blind citizens with a reasonable level of subsistence in accordance with the standards of

living in the community. Such provision should take into account the fact that all blind persons, by reason of their blindness, have needs which are additional to those of a seeing person. Such special provision for the blind may be embodied in a general program of social security, or may be expressly made for the blind.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by MR. ALLEN (United States), and carried unanimously.

Subsequent to the adoption of this resolution MR. CARD (United States) moved that the matter be reopened since in his opinion adequate opportunity had not been given for consideration of the question of recommending the provision of handicap allowances to all blind persons, such allowances being designed to off-set additional living costs imposed by blindness. DR. STREHL (Germany) seconded this motion. Such course of action was agreed to and after considerable discussion it was agreed by 20 votes to 12 to append the following rider to the resolution already adopted as quoted above.

The Assembly endorses the provisions made by Sweden, Denmark and Australia, which countries grant an amount to the blind free of means test in recognition of the extra and unavoidable expense of living on account of blindness, such grants being paid over and above basic maintenance allowances. The Council recommends similar legislation by all governments whose economies can justify this commendable provision.

RESOLUTION XI

The World Assembly of the World Council for the Welfare of the Blind resolves to address an official and formal request to the International Air Transport Association urging that organization to grant a general fare concession to the blind, which would allow a blind person, accompanied by an escort, to purchase two tickets for the price of one ticket at the ruling rate for the class of travel being used. It is further resolved that all Governments, Air Lines and other interested groups be urged to use their influence in securing such concessions to the blind in their respective countries.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom) and seconded by MR. CLUNK (United States).

PROF. BENTIVOGLIO (Italy) moved an amendment asking for the grant of a concession rate of 50 percent of the normal

fare to a blind person traveling alone or with an escort. The motion was defeated by a vote of 25 to 11.

The resolution was then unanimously adopted.

RESOLUTION XII

Progress in scientific and technical fields has added greatly to the independence in life and outlook of the blind. This Assembly of the World Council for the Welfare of the Blind urges that future progress in these fields be closely followed and recommends that all international bodies and national governments be requested to give full material and financial support to future research projects recognized by the World Council for the Welfare of the Blind for furthering the development of physical, social, economic and scientific independence of the blind.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by MR. LICINA (Yugoslavia), and carried unanimously.

RESOLUTION XIII

The World Assembly of the World Council for the Welfare of the Blind recommends that steps be taken to establish an international manual alphabet, amongst the Western countries in the first instance, and that a small international body of experts be constituted, composed of three deaf-blind persons and one sighted consultant, to determine which communication devices should be recommended for use by the deaf-blind.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by DR. STREHL (Germany), and carried unanimously.

RESOLUTION XIV

The World Assembly of the World Council for the Welfare of the Blind resolves that the Council should compile a catalogue of films, posters and pamphlets designed to arouse interest in the prevention of blindness and welfare of the blind and, in collaboration with the appropriate international agencies, to stimulate the production and distribution of such publicity material to interested agencies and organizations throughout the world.

The adoption of the resolution was moved by MR. COLLIGAN (United Kingdom), seconded by MR. HEDKVIST (Sweden), and carried unanimously.

Presentation of Report of Planning and Budget Committee: E. W. Christiansen, Secretary, Planning and Budget Committee

The Planning and Budget Committee presented the following *Summary of Future Activities of the World Council for the Welfare of the Blind*.

1. The Council shall take all necessary steps through international organizations, governments and member agencies to ensure international recognition of the acceptance of an international definition of blindness and the introduction of services in all countries for the education, rehabilitation and training of persons falling within that definition. This would include the compilation of statistics in all countries.

2. The Council shall circulate annually or more frequently questionnaires to all member countries seeking up-to-date information on selected aspects of services to the blind, current problems or any other matters of general interest. The information so received shall be speedily disseminated to all representative members and used in other ways towards the improvement of services to the blind throughout the world.

3. The Council shall maintain and expand its efforts towards persuading international governmental and non-governmental organizations to assume increased responsibility for the operation of world-wide programs for the prevention of blindness and the welfare of the blind.

4. The Council shall provide its member countries with information and materials designed to assist those countries to launch and maintain programs of public education and the prevention of blindness and the abilities of the blind and the development of public support to provide adequate programs and provisions for the blind.

5. The Council shall provide its representative members with all necessary information that would enable them to urge their governments to progressively improve national services and provisions for the prevention of blindness and the welfare of the blind, and to seek support of their respective governments for international activity in these fields as described in paragraph 3.

6. The Council shall encourage the creation of national councils composed of functioning organizations of and for the blind wherever such do not exist at the present.

7. The World Council must strive to become financially independent. Its essential program must be financed by membership fees and proportional national contributions of its member countries. The Council shall not be responsible for payment of any travel costs or maintenance costs of delegates or observers attending future world assemblies.

8. Budget requirements —	
Staffing	\$ 7,000
Postage, stationery,	
Miscellaneous	3,000
Executive Committee	
Biennial meetings	2,000
Accumulated reserve for World Assemblies	3,000
	<hr/>
	\$15,000

It is recommended that the membership fee be increased to \$100 for each representative member any country is entitled to name.

It is recommended that the Executive Committee be empowered to raise the anticipated deficit by additional national contributions from governmental and/or voluntary sources.

DISCUSSION

The adoption of the report was moved by MR. SEIERUP (Denmark) and seconded by MR. LICINA (Yugoslavia). MR. HAKKINEN (Finland) felt that the matter of the Constitutional amendment concerning the increase of membership fees should be considered before the report was studied in detail. The Chairman agreed. MR. SEIERUP moved the adoption of such a motion which was seconded by MR. SHAH (India). MR. HAKKINEN then moved an amendment setting the annual membership fee per country at a minimum of \$100 plus \$50 for each ten million of the general population up to a limit of \$600. MR. SHAH felt that such an amendment was not in order and did not support it. MR. HEDKVIST (Sweden) stated that the Scandinavian countries did not support MR. HAKKINEN. The original motion as recommended in the Committee's Report was then adopted. MR. DASSANAIKE (Ceylon) stated his objection to the lack of travel assistance for delegates attending Assemblies. MRS. BENDING (Canada) supported the recommendation for fullest co-operation between organizations of and for the blind. The Report was then adopted unanimously.

Report of Nominating Committee on Election of Executive Committee:
G. L. Raverat, Chairman, Nominating Committee

On recommendation of the Nominating Committee the following Executive Committee was elected:

Area Represented

Europe

Prof. Dr. Carl Strehl, Germany
Henri Amblard, France
Stevan Uzelać, Yugoslavia
Gerard Borre, Belgium

	J. C. Colligan, England Prof. Paolo Bentivoglio, Italy Hans C. Seierup, Denmark
North America	Col. E. A. Baker, Canada M. Robert Barnett, United States Mr. Geo. S. Card, United States Alfred Allen, United States Prof. Alejandro Meza, Mexico
East Asia	Takeo Iwahashi, Japan R. M. Alpaiwala, India Mr. Amal Shah, India Kingsley Dassanaik, Ceylon
South America	Juan Antonio Pardo Ospina, Colombia Jose Espinola Veiga, Brazil
Middle East	Dr. Mohammed Nour, Egypt
Oceania	Dr. Chas. W. Bennett, Australia
Members-at-large	Mitat Enc, Turkey Dr. Louis Van Schalkwijk, South Africa F. G. Tingen, Netherlands
Chairman of Consultative Committee on Education	E. H. Getliff, England
Chairman of Consultative Committee on Braille	Sir Clutha Mackenzie
WCWB Secretary General	Eric T. Boulter, United States

Report of Nominating Committee on Election of Officers: G. L. Raverat, Chairman, Nominating Committee

On recommendation of the Nominating Committee the following Officers were elected.

OFFICERS

President	Col. E. A. Baker, Canada
Vice-Presidents	Prof. Dr. Carl Strehl, Germany Mr. R. M. Alpaiwala, India Prof. Alejandro Meza, Mexico Prof. Paolo Bentivoglio, Italy Gerard Borre, Belgium
Secretary General	Eric T. Boulter, United States
Treasurer	Henri Amblard, France

Vote of Thanks

A vote of thanks was extended to the following organizations:

UNESCO

Union des Aveugles de Guerre

Representatives of the Press and Radio

American Foundation for the Blind

American Foundation for Overseas Blind

British Group of Agencies

Canadian National Institute for the Blind

and to all persons who worked to make the Assembly a success.

Other Business

A motion was proposed by C. H. W. G. ANDERSON (United Kingdom) and seconded by M. ROBERT BARNETT (United States) calling for the establishment of a fund to administer the Louis Braille Museum and Shrine at Coupvrey. The Executive Committee was authorized to work out the details of such a plan. A rug, donated by India, was auctioned off, the proceeds to go to the fund. It was purchased by Mr. Barnett for \$50 on behalf of the American Foundation for Overseas Blind.

CAPT. M. C. ROBINSON (Canada), President of the American Association of Workers for the Blind, extended a cordial invitation to all delegates to attend meetings of his Association.

Closing Remarks: Col. E. A. Baker

We have now reached the conclusion of our deliberations at this Conference. We will part and each will go back to his own country. I hope that every delegate will feel that we have made progress; that we have a better understanding of the many problems and of the point of view in other countries, and that we will be always ready to help each other whenever and wherever possible.

I wish to impress on you the responsibilities of our World Council and your responsibilities as delegates, both here and in your native land. As a world organization we gathered to exchange ideas on service policies and methods and all other matters affecting our general program. As a world organization we have achieved recognition and consultative status with certain United Nations organizations. As a world organization we can present to the appropriate authorities in the United Nations the resolutions and any other matters which may be helpful to the various United Nations organizations in their program and on which they can act. We can co-operate with other international non-governmental organizations in respect to those interests which we have in common with them. May I remind you that,

in agreement with these contemporary organizations, a permanent committee has been established.

You as delegates must accept the responsibility of carrying back, each to his own land, any helpful information or agreements reached here, in order that your fellow-workers and your Governments may be advised. It will be your responsibility to afford leadership in the development of public information, improved services and the support of your respective Governments, both locally and through the United Nations. It is in this way that our combined efforts can be most effective.

I extend best wishes for a safe return and earnestly hope that your efforts on behalf of the blind may be attended with the fullest measure of success.

SERVICES AVAILABLE TO THE BLIND IN MEMBER COUNTRIES

In order that Conference participants would be able to intelligently discuss various topics concerning the welfare of the blind, it was felt that up-to-date information on the operation of services to the blind in the Council's member countries should be made available to them. The leader of each national delegation was therefore invited to complete the questionnaire originally circulated prior to the 1949 Oxford Conference or, if information had been supplied at that time, to note whatever changes had taken place in the intervening years. The replies received are now included in summarized form.

QUESTIONNAIRE

Part I—Ascertainment

1. What is the accepted definition of blindness in your country:
 - (a) for children?
 - (b) for adults?
2. What authority prescribes it, and for what purpose is it used?
3. What is the known or estimated number of blind persons, male and female?
What is the estimated source of these figures?
4. What is the proportion of blind persons per 100,000 of the general population?

Part II—Rehabilitation and Training

5. Are any arrangements made to help newly-blinded adults to adjust themselves to blindness? If so, what is their nature and extent?
6. What provision is made and by whom for:
 - (a) the training and maintenance whilst under training of blind persons for work in:
 - (i) special workshops for the blind?
 - (ii) factories?
 - (b) the training of the blind for professional and clerical work?
 - (c) any other occupations?

Part III—Employment

7. How many blind persons are employed in your country:
 - (a) in special workshops?
 - (b) in manual and other occupations at home?
 - (c) in business on their own account?
 - (d) in factories?
 - (e) in clerical work, e.g., shorthand, typewriting and telephony?
 - (f) as commercial representatives?
 - (g) in professions?
 - (h) in any other occupations?

8. What articles do the blind produce:
 - (a) in special workshops?
 - (b) in their homes?
9. What operations do the blind perform in factories?
10. What careers do the professional blind follow?

Part IV—Economic Provision

11. Are any special pensions or allowances given to the blind?
12. Do the blind benefit from any system of social security? If so, on what conditions?
13. Are the blind granted any remission of taxes? If so, in what form?
14. What arrangements are made to supplement the earnings of blind workers who are unable to earn a living wage?
15. Give details of any other special financial assistance which the blind receive.
16. Does your government or any other public authority make special arrangements to purchase goods made by the blind, or to assist blind workers in any other way?

Part V—Care of the Blind at Home

17. What services are provided for blind persons who live at home? Who is responsible for such services?
18. Are any persons employed to visit the blind and teach them in their own homes? If so, who employs them?
19. Are there any organized systems of help for the blind by unpaid volunteers?
20. What arrangements are made for training workers for the blind?

Part VI—Homes for the Blind

21. How many Homes for the Blind are there? By whom have they been established or financed?
22. Are your Homes for separate sexes, or mixed? Are they wholly or mainly for aged blind people?
23. Have you any Homes for blind people who also suffer from other handicaps, e.g., deafness, mental defects, epilepsy, etc.?

Part VII—Responsibility for the Blind

24. Is work for the blind carried on in whole or in part by:
 - (a) the national government?
 - (b) regional authorities?
 - (c) local authorities?
 - (d) private organizations?
25. What is the nature and extent of the responsibility of each of the above bodies?
26. Do any private or voluntary organizations work for the blind independently or on behalf of any public authorities? Do they receive any financial assistance from public funds?

Part VIII—Legislation

27. What is the effect of legislation on the welfare of the blind?

28. Through which Ministries or Government Departments is any existing legislation operated?

Part IX—Special Facilities for the Blind

29. Give details of any special facilities which the blind enjoy when travelling, e.g., free passes, reduced fares, etc.
30. Who manufactures and distributes:
 (a) embossed books for the blind?
 (b) apparatus for the blind?
 and how is the production of such books and apparatus financed?
31. Does your Government remit Customs Duty on apparatus for the blind imported from other countries? If so, on what conditions?
32. Are Talking Books manufactured and distributed? If so, to what extent?
33. Are there any special arrangements for the distribution of radio sets to the blind, either free or at reduced cost? Do the blind enjoy free radio receiving licenses?

AUSTRALIA

I. ASCERTAINMENT

Definition of Blindness—Central visual acuity, with correcting glasses, of less than 6/60 (Snellen) or a higher degree of central vision if there is a field defect in which the peripheral field has been contracted, or other collateral defect. Definition prescribed by Federal government for determining pension eligibility and by Local Authorities.

Number of Blind Persons—Estimate: 5,500 (70 per 100,000).

II. REHABILITATION AND TRAINING

Some degree of rehabilitation training is offered through the Federal Department of Social Services. Re-adjustment of newly blinded adults carried out through various welfare bodies in Special Workshops or outside factories.

III. EMPLOYMENT

Special Workshops	500
Home workers	60
Business on own account	60
Factories	300
Clerical	35
Commercial Representatives	20
Professions	40
Other Occupations	40

Note: Some of the above figures are estimates.

Articles Produced—Special Workshops: Baskets, brooms, mats, matting, millet brooms, ships' fenders, cane and wicker furniture, perambulators, cane cots, bedding, string bags, chair caning, step ladders, clothes horses, shoe tidies, bath mats.

At home: baskets, woven materials, etc., mats, stools, pottery, knitted goods.

Factory operations: cleaning, process work, ropemaking, packing, sorting, drilling, power pressing, de-burring, gauging, and other manual and machine operations, process works in photographic operations, etc.

Professions: Law, teaching, journalism, music, social work, entertainment, Members of Parliament, clergy, etc.

IV. ECONOMIC PROVISION

Federal government pension of £3 per week free of any means test or £3/10/- per week subject to a means test for all blind persons over sixteen years of age, but ALL blind can receive at least £3 per week from this source.

Various agencies provide employment (which assures social security) in sheltered workshops and a retirement allowance scheme. All agencies supplement earnings of blind workers in sheltered workshops.

Tax deduction may be claimed for amounts paid for guide service.

Financial assistance provided by agencies for unemployable blind.

No special provision for purchase of blindmade goods though one state government does purchase all its requirements of those goods manufactured at Blind Institute.

V. CARE OF THE BLIND AT HOME

Care of the blind at home including home visitation, financial assistance, instruction in braille and handicrafts, guides and home assistance for the sick, are provided by Voluntary Agencies.

Training courses for workers for the blind conducted by the Senior executive members of each organization.

VI. HOMES FOR THE BLIND

Twenty homes (including residential schools for blind children) established by Voluntary Agencies. Except for schools most homes are for the aged blind. Blind people with other handicaps are generally housed in regular homes, though one special home for them has been established.

VII. RESPONSIBILITY FOR THE BLIND

National government pays pensions and provides medical care and limited rehabilitation services. All other responsibility assumed by Voluntary Agencies except in Queensland where regional authorities extend some assistance. Voluntary Agencies receive very limited assistance from public funds.

VIII. LEGISLATION

Some degree of basic economic security is ensured through the Federal Pension and free medical aid and some State Governments have through their education Departments taken over the education of the blind child. Existing legislation administered through the Department of Social Services in the Federal Government.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—Free train, tram and bus travel, reduced interstate rail travel and concessional airway fares.

Embossed Literature—Embossed books are both purchased from England and America and produced by local organizations and distributed through these agencies.

Apparatus—Both imported from abroad and produced in Australia and distributed through local agencies.

Talking books—Imported and distributed through local agencies. Free lending libraries in each state.

Radio—Free license. All states obtain discounts for purchase while Victoria and Queensland also provide free sets to blind people who cannot afford same.

Customs duty is not paid on imported books or apparatus.

BRAZIL

I. ASCERTAINMENT

Definition of Blindness—No official definition of blindness.

Number of Blind Persons—Estimate based on 1940 census: 60,701 (Male 31,281—female 29,420) (147 per 100,000).

II. REHABILITATION AND TRAINING

Limited training and instruction provided in special homes.

The Brazilian Foundation for the Blind in co-operation with the National Service for Industrial Training has recently initiated a program for the newly blind which includes vocational counseling, training, and selection and placement of the blind in industry. Services soon to be inaugurated include casework, sight restoration, home-work, home teaching, prevention of blindness.

III. EMPLOYMENT

No figures available because of the very limited number of people employed at this time.

IV. ECONOMIC PROVISION

No special pensions or allowances are provided.

Under Federal, State and Local Civil Service regulations blindness is considered cause for retirement, after which the person receives an "invalid" pension.

V. CARE OF THE BLIND AT HOME

No organized home teaching service.

Braille transcribing by volunteers carried out at Brazilian Foundation for the Blind.

Training of workers: Special post-graduate course for trained teachers carried on at Institute of Education in Sao Paulo. Teacher training course provided at Benjamin Constant Institute in Rio de Janeiro.

VI. HOMES FOR THE BLIND

Approximately fifty homes for the blind of all ages. Separate homes are maintained for men and women. No facilities for additionally handicapped blind.

VII. RESPONSIBILITY FOR THE BLIND

Most work carried out by voluntary organizations which receive some government grants. However, the Benjamin Constant Institute in Rio de Janeiro is maintained by the Federal Ministry of Education and Health and the Institute Sao Rafael is maintained by the State of Minas Gerais.

VIII. LEGISLATION

There is no legislation in favor of the blind.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—Reduced fares on some transportation lines through the efforts of the Brazilian Foundation.

Embossed Literature—Books embossed by the Brazilian Foundation for the Blind in Sao Paulo and the Institute Benjamin Constant, Rio de Janeiro.

Apparatus—No appliances are manufactured. Since 1953 the Federal Government has allowed the duty free importation of apparatus imported from abroad.

Talking Books—The Brazilian Foundation is exploring the matter of the manufacture of talking books with the hope that they will be in production in the near future.

Radio—No special arrangements for distributions of radios. License fee is charged.

CANADA

Supplementary Information to 1949 Oxford Conference Proceedings

I. ASCERTAINMENT

Number of Blind Persons—Estimated 21,800 (146 per 100,000). Of these, 20,506 are registered by the Canadian National Institute for the Blind. (11,031 male—9,475 female).

III. EMPLOYMENT

Special Workshops	627
Home workers	4,750
Business on own account	44
Factories	415
Clerical	20
Commercial Representatives	499
Professions	224
Other occupations	225

VI. HOMES FOR THE BLIND

CNIB has 15 homes for the blind. Two new homes are now under construction. No special homes for persons with multiple defects, but deaf-blind accepted in homes for the blind. The new centre for Toronto and district will be constructed during 1955, which will provide accommodation for 100 permanent residents, in addition to young people in training to fill positions in CNIB. There will also be some accommodation for people who are being brought in for vocational training.

CEYLON

I. ASCERTAINMENT

Definition of Blindness—Children who cannot study in normal schools are considered blind. For adults, those who are unable to see fingers at a distance of one meter with correction are considered blind by the Department of Social Services.

Number of Blind Persons—Government Census estimates 4,365 blind persons, but this is considered a gross under-estimate, a more reliable figure probably being 10,000 to 14,000. The Department of Social Services has recently launched a Program of Voluntary registration of the blind on representations made by the National Association for the Blind.

II. REHABILITATION AND TRAINING

No arrangements at present for training of the newly blind, but it is hoped that this service will be available in the sheltered workshops to be set up in the near future.

Hostels providing free board, lodging and clothing are available for trainees in workshops for the blind.

Training in shorthand-typing and telephone operating given at the School for the Blind, Mt. Lavinia. By arrangement with a

Massage and Physiotherapy Clinic, training in massage is extended to blind individuals. A few blind persons have recently been employed in open industry sorting graphite in a graphite factory and making boxes in a vest factory.

III. EMPLOYMENT

Special Workshops	70
Manual occupations	10
Business on own account	8
Factories	2
Commercial representative	1
Professions	10
Other occupations	15

Articles produced—In workshops and at home: baskets, chairs, coir mats and rugs, knitted wear, cloth, towels and other woven items.

Factory operations: Operating weaving machine; making cardboard boxes.

Professions: Piano tuning, massage, music teaching, teaching, librarian.

IV. ECONOMIC PROVISION

No special pensions, allowances or Social Security scheme but government provides some public assistance.

Home workers who cannot earn a living wage receive supplementary payment according to individual needs.

There are no laws requiring the purchase of blind made articles by Government departments, but many departments and local government institutions do buy blind made articles, though not regularly.

V. CARE OF THE BLIND AT HOME

Blind persons who work at home under the Program of the Ceylon School for the Blind pay the school for raw materials in easy installments; finished goods are paid for at once by the School and sold through its shop. In cases of need the sick are cared for and other services provided. These services are provided only to the blind who work under the auspices of the School.

No regular home visiting or teaching service.

No work carried on by unpaid volunteers other than those who serve on committees of agencies for the blind.

No arrangements to train workers for the blind, but a few have been sent abroad for study.

VI. HOMES FOR THE BLIND

Two homes for the blind maintained by Ceylon School for the Deaf and Blind. Aged blind accepted in normal homes for the aged. No facilities for blind with additional handicaps.

VII. RESPONSIBILITY FOR THE BLIND

Work carried on by private organizations with some financial assistance from the government.

Ceylon School for the Deaf and Blind provides services for the education, training and employment of the blind and maintains a sheltered workshop, a homeworkers scheme, a welfare scheme and a shop for the sale of blind-made articles.

St. Joseph's Catholic School for the Deaf and Blind educates and trains a few blind children for useful work.

The National Association for the Welfare of the Blind is a recently established organization. The program for the future includes preparation of a register of the blind, legislation in favor of the blind,

pensions and handicap allowances. Both schools for the blind receive very small government financial grants. A large proportion of the adult program of the Ceylon School for the Deaf and Blind is financed by the Department of Social Services which is now establishing hostels and workshops for the blind.

VIII. LEGISLATION

No legislation in favor of the blind.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—The Ceylon Government Railway allows blind persons to travel for half fare and their escorts for $\frac{1}{4}$ of the ordinary fare. Free reserved accommodation is always generously allowed for parties of blind people and their escorts on the Ceylon Government Railway.

Embossed literature—All books produced in Ceylon are handwritten. Many are imported from England, Belgium and Holland.

Apparatus—Imported chiefly from England, Italy and Belgium. Costs for all items are met by the institutions themselves. Apparatus for the blind is exempt from customs duties if the authorities are satisfied that they are for the use of the blind only.

Radios—Free radio licenses are granted on individual application.

EGYPT

I. ASCERTAINMENT

Definition of Blindness—Those having vision of 1/60 (counting the fingers at a distance of less than one meter) are considered blind. This definition, applicable to both children and adults, is prescribed by the Ministry of Public Health for medical and statistical purposes.

Number of Blind Persons—75,048 (38,352 male—36,696 female) National Census estimate. (400 per 100,000).

II. REHABILITATION AND TRAINING

There is no special arrangement to provide the blind with maintenance while undergoing training either in workshops or in factories, but such service is usually provided by the agency concerned.

III. EMPLOYMENT

There are about 300 blind persons employed in special workshops and about 200 homeworkers sponsored by public or voluntary agencies for the blind. Few blind persons employed in other occupations.

Articles Produced—Workshops and at home: brushes, baskets, brooms, woven and knitted goods.

Professions: Teaching, law, music, journalism, religion.

IV. ECONOMIC PROVISION

Blind benefit from general Social Security Act for all handicapped persons. No remission of taxes nor supplementation of wages for blind workers unable to earn a living. Very limited charitable endowments. No arrangement for the government or other public authority to purchase blind-made products.

V. CARE OF THE BLIND AT HOME

Home teaching department of Demonstration Centre for the Blind employs 12 home teachers and will soon train others for government as well as private agencies. Home industries will soon be extended to the blind at home.

The Ministry of Education trains primary school teachers. Beginning next fall students from Egypt and other Arab countries will begin course of training in various aspects of work for the blind at the Demonstration Centre.

Only organized unpaid volunteer work for the blind is carried on by Red Crescent Society.

VI. HOMES FOR THE BLIND

There are no homes for the blind in Egypt other than residential schools.

VII. RESPONSIBILITY FOR THE BLIND

Work for the blind carried on by national government and private organizations, the responsibility varying with each activity. Such activities are all in the developing stage. Voluntary organizations work independently. Both private voluntary organizations and governmental projects receive financial assistance from public funds.

VIII. LEGISLATION

The Social Security Act, which at present is the only legislation effecting the blind, is operated through the Ministry of Social Affairs.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—Very limited travel concessions allowed for the blind, and these only in Cairo and on certain means of transport.

Embossed Literature—There are two private organizations manufacturing and distributing books for the blind.

Apparatus—All apparatus imported from abroad. Customs duties remitted in individual cases, but no national law.

Radio—No arrangement for the distribution of radios.

ENGLAND AND WALES

Supplementary Information to 1949 Oxford Conference Proceedings

I. ASCERTAINMENT

Number of Blind Persons—90,606 (207 per 100,000). Annual statistics of Ministry of Health (December 31, 1953).

II. REHABILITATION AND TRAINING

Rehabilitation and training provided for the war-blinded through St. Dunstan's Organization for Men and Women blinded on war service. St. Dunstan's continues to care for this section of the blind throughout their lives.

Rehabilitation for civilians provided by Royal National Institute for the Blind. Training of civilians who have been educated in special schools for the blind is normally the responsibility of Local Education Authorities up to the age of 21, and thereafter that of the Ministry of Labour. In certain circumstances, however, (where for example sight is lost between the ages of 16 and 21) the Ministry of Labour assumes responsibility from the outset. Training in manual occupations is given in a number of centres throughout the country. Training in shorthand-typing given at Royal Normal College for the Blind and Royal National Institute's School of Shorthand and Telephony, London. Training in Physiotherapy at Royal National Institute's School of Physiotherapy. Centre for basic industrial training for those entering factories opened by Ministry of Labour.

III. EMPLOYMENT

Special Workshops	3,144
Home Workers	1,306
Business on own account (including commercial representatives)	770
Factories	2,364
Clerical	948
Professions	772
Other occupations	871

VI. HOMES FOR THE BLIND

There are 147 Homes and Hostels for the blind (14 for men, 29 for women, 104 for both sexes). Three are reserved for the deaf-blind, but several other Homes accept deaf-blind persons. Most Homes are for the aged, and some accept blind persons needing special medical care. Two are set aside for the industrial or social rehabilitation of the newly-blind. Some are Holiday Homes and several other Homes accept holiday guests in addition to permanent resident when possible.

FINLAND

Supplementary Information to 1949 Oxford Conference Proceedings

I. ASCERTAINMENT

Number of Blind Persons—4,211 (2,094 male—2,117 female) estimate based on government statistics in 1953.

II. REHABILITATION AND TRAINING

In cases of financial need Law provides for 1) medical care of the newly blind towards sight restoration and 2) manual training course of 3 to 5 years at special training centers. After training blind work on own account in workshops or in open industry.

III. EMPLOYMENT

Blind persons under sixty years of age are employed as follows:

basketry and brushmaking	467
massage and handicrafts	355
farming	197
home economics	326
in factories	23
other occupations	204
in business	61

In addition there are 741 blind persons over sixty years of age who are employed.

IV. ECONOMIC PROVISION

Handicap allowance has been increased to 78,000 Finnish Marks annually. The handicap allowance is only given to blind people who are able to work to encourage them to do so. It is not counted as earned income for income tax purposes.

V. CARE OF THE BLIND AT HOME

Social workers, employed by private agencies, visit the blind at home, mainly in Helsinki. War blind are visited by volunteers. There is no need for home teaching services as all blind persons have opportunity to attend manual training school for the blind.

Teachers of blind children must be competent elementary or secondary school teachers and in addition undergo a special training course in the education of the blind.

VI. HOMES FOR THE BLIND

Four summer holiday homes for the blind run by private organizations. One home for the deaf-blind.

VII. RESPONSIBILITY FOR THE BLIND

In addition to responsibilities noted in Oxford Proceedings, the Government finances all schools for the blind, both on the elementary and training levels.

VIII. LEGISLATION

Present legislation regarding education is sufficient to meet the needs of blind children, but inadequate for vocational education and training of the adult blind. Legislation for the blind is administered partly through the Ministry of Education and partly through the Ministry of Social Affairs.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—School pupils and guides may travel free to and from school at holiday periods.

Embossed Literature—Two braille periodicals published by a private organization for the blind with some State assistance.

GERMANY

Supplementary Information to 1949 Oxford Conference Proceedings

NOTE: The information noted here applies only to the German Federal Republic and Western Berlin. The St. Georg Union of the War Blind is no longer in existence, the Union of the War Blind in Germany, Inc., now being the official organization of the war blind. The differences in legislation and administration which existed in 1949 in the three Western Zones of Germany have now been abolished through the formation of the German Federal Republic.

I. ASCERTAINMENT

Definition of Blindness—Blind persons are those who have suffered complete loss of sight, or who cannot find their way alone in unfamiliar surroundings, or whose visual acuity is less than 1/60. In cases of restricted vision a person may be considered blind even with a better acuity.

Persons who have a serious restriction of vision but are able to travel alone in unfamiliar surroundings are considered partially sighted.

Definition approved by the Federal government for determining eligibility for disability pensions for war blind, welfare assistance to civilian blind and labor exchange for all blind persons. Is also contained in several government acts (War Disabled Pension Act, Welfare Amendment Act, Disabled Act, etc.).

Number of Blind Persons—War blind: 7,000, based on statistics of Federal Ministry of Labor; Civilian Blind 28,000, based on 1951 census of Federal Ministry of Interior. Total Blind 35,000 (22,000 male—13,000 female) (70 per 100,000).

II. REHABILITATION AND TRAINING

Cost of training—War Blind: Central welfare offices (under Federal Pensions Act of 1950, Reich Decree of 1924, Welfare Amendment Act of 1953).

Insured Civilians: As before.

Other Civilians: District and State Welfare offices (under Reich decree of 1924, Welfare Amendment act of 1953).

III. EMPLOYMENT

Amend percentages as follows:

Home workers	35%
Commercial Representatives	3%
Professional	8%

Add to factory processes: printing.

Add to professions: tailoring, sculpting, wood-carving, monitoring broadcasts, information service in public offices.

IV. ECONOMIC PROVISION

War blind receive basic pension and other aid for their general health and welfare according to the Federal Pensions Act of 1950.

Needy civilian blind who do not receive assistance under other laws, are granted an allowance under the Welfare Amendment of 1953. Supplementary allowance paid where necessary in Bavaria to bring monthly allowance to 90 DM and in Northrhine Westphalia to 75 DM.

Civilian blind if over 65 (men) and 60 (women) may receive special financial grants in cases of proven loss due to war and post-war circumstances under Burden Compensation Act of 1952.

According to Disabled Act of 1953, special tax must be paid by employers who do not employ a prescribed number of disabled persons. The funds so accumulated are used for training the blind and adaptation of equipment for their use.

Turnover Tax—In addition to 1949 information it should be added that workshops for the blind which do not employ more than two sighted workers are exempt from taxes.

Remission of property tax to disabled persons unable to earn a living.

Disabled persons may request remission of car tax if car is for personal use. 1950 Decree of Federal Ministry of Interior recommends that public agencies should meet 50 percent of their requirements where possible from blind-made goods. Goods so purchased by private agencies may be deducted, where applicable, from tax levied on employers who do not hire prescribed number of disabled workers.

V. CARE OF THE BLIND AT HOME

There are also several blind welfare organizations of local importance.

VI. HOMES FOR THE BLIND

In several states residences have been established for employed blind persons (and their families) where they may rent a room or apartment while working in nearby localities.

Stuttgart Institute for the Blind maintains a deaf-blind department. Single blind persons with additional handicaps accommodated at the Numbrecht Protestant Home for the Blind.

VII. RESPONSIBILITY FOR THE BLIND

National Government—General welfare (vocational training, economic security, etc.) of the war blind.

Regional and local authorities—General welfare of the civilian blind.

Private organizations—of the blind extend certain specialized services to their members. Private agencies which are nation-wide in scope receive some financial assistance from the federal government.

VIII. LEGISLATION

Public funds are now available for training the newly blind, and for special assistance to the aged blind in addition to disability or old age pensions. The Federal Ministries of Labor, Trade and Interior are mainly responsible.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—When traveling on business on Federal Railways and buses blind persons and guides may both travel for half fare each. At other times the guide may travel free while the blind person pays full fare, (usually third class travel). War blind and their guides generally may travel without the payment of fare.

Talking Books—German Talking Book Library founded early in 1954. It is hoped soon to begin production.

Radio—On request all blind persons may receive free radio licenses. Organizations for the blind distribute free radio sets to needy blind.

GREECE

Supplementary Information to 1949 Oxford Conference Proceedings

I. ASCERTAINMENT

Definition of Blindness—Persons who are totally blind, or whose visual acuity does not exceed 1/25 and who cannot pursue work for which eyesight is essential, are considered blind.

II. REHABILITATION AND TRAINING

Civilian and war blind may receive training at the two hostels of the Lighthouse for the Blind in Athens or at the training hostel of the Ministry of Welfare.

Training in poultry farming at Lighthouse Agricultural School. Upon completion of course trainees receive initial stock of poultry.

Six month course in simple handicrafts provided at the vocational school of the Near East Foundation. Students are provided with tools of their trade on completion of training.

III. EMPLOYMENT

About ten blind persons employed in special workshops; twenty in broom factory; ten on homework; five in business on own account; fourteen in clerical work; fifteen in poultry farming.

Articles Produced—Workshops: Brooms, brushes, baskets, nets, chair caning, etc. At home: slippers, woven and knitted articles. Professions: Law, music, teaching.

IV. ECONOMIC PROVISION

Law passed in 1954 stipulates that all state agencies, both military and civilian, must purchase all articles required for cleaning from workshops for the blind manufacturing such items.

V. CARE OF THE BLIND AT HOME

Home teaching service recently established in Attica.

VIII. LEGISLATION

Most legislation is the responsibility of the Ministry of Social Welfare. That passed during recent years has considerably widened opportunities for the blind.

IX. SPECIAL FACILITIES FOR THE BLIND

Talking Books—Recording apparatus has recently been donated to the Lighthouse.

HOLLAND

Supplementary Information to 1949 Oxford Conference Proceedings

I. ASCERTAINMENT

Definition of Blindness—No officially accepted definition of blindness. Children who cannot use printed textbooks are accepted in school for the blind, and adults having only 1/10 visual power (or having more than 1/10 but with limited field of vision) are regarded as blind.

II. REHABILITATION AND TRAINING

The Dutch Foundation for the Blind has recently appointed a psychologist whose responsibility is to keep in contact with newly blind persons and other blind adults to help them adjust to blindness, especially in relation to their employment, etc.

IV. ECONOMIC PROVISION

An increasing number of blind persons employed in special workshops now fall under general arrangement for handicapped people including social security.

VI. HOMES FOR THE BLIND

Nine homes, all founded and maintained by voluntary philanthropies. Six accept both sexes of which two are for married couples.

INDIA

I. ASCERTAINMENT

Definition of Blindness—1944 Government of India report on Blindness recommended as a temporary definition that a person be considered blind if he is "unable to count the fingers of a hand held up at one yard's distance." The Report also recommended the adoption of the following as work for the blind progresses:

Children—Too blind to be able to read the ordinary school books used by children.

Adults—So blind as to be unable to perform any work for which eye sight is essential.

Number of Blind Persons—Estimated at 2 million (500 per 100,000).

II. REHABILITATION

No separate rehabilitation centers for newly blinded adults are in operation, though such persons are admitted to existing schools and institutions for the blind.

Except for the Workshop for the Blind and Government Training Center at Dehra Dun, workshops are practically non-existent. A few blind workers have been placed in open industry. Institutions extending vocational training receive limited financial grants from State Governments.

III. EMPLOYMENT

No estimates available on number of employed blind persons.

Articles Produced—in workshops and at home: Cane products, chairs, baskets, etc.; woven products such as towels, sheeting, rope, knitted goods, tailoring, Bidi cigarettes, sisal and hemp work.

Factory operation; At Textile Mills in Bombay blind are employed at bobbin cleaning, folding of cloth and some stitching operations.

Professions: Teaching, law, massage, salesmen.

IV. ECONOMIC PROVISION

No economic provisions or allowances for the blind.

Since All-India Conference on Work for the Blind in 1952 State Governments have purchased goods made by the blind. The government of Bombay also requires the utilization of certain goods and services of the Industrial Home for the Blind of Bombay.

The Calcutta Blind School has started a hostel for blind artisans.

V. CARE OF THE BLIND AT HOME

No services provided for the blind at home.

No organized system for training workers for the blind. Training classes for teachers of the blind are held at the School for the Blind in Palamcottah and at Calcutta Blind School in co-operation with the University of Calcutta. Training in crafts is provided at the Training Centre for Adult Blind, Dehra, Dun.

VI. HOMES FOR THE BLIND

About twelve homes for the blind where adult blind (mostly male) are trained and which also care for a few aged and infirm blind people, are maintained through charity though a few also receive limited government grants. No facilities for additionally handicapped blind though five institutions accept the deaf-blind.

VII. RESPONSIBILITY FOR THE BLIND

Responsibility for the blind shared by

National Government—directs policy governing prevention and cure of blindness and the education and welfare of the blind. Assistant Educational Advisor on Blindness attached to Ministry of Education. Maintains training center for Adult Blind and Braille Press at Dehra Dun.

Regional Authorities—Some States carry out programs for the prevention and cure of blindness, and extend financial grants to blind welfare institutions and schools.

Private Organizations—Most work for the blind carried out by private institutions.

VIII. LEGISLATION

No legislation in favor of the blind exists although the Government of India Report on Blindness (1944) recommended such legislation.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—Escort accompanying blind person usually entitled to travel at half fare on government railways. Blind student and guide both entitled to travel at half fare on government railways if student is attending recognized educational institution.

Embossed Books—Central Braille Press at Dehra Dun printing limited number of school textbooks in Hindi. It is hoped shortly to establish a second press in Calcutta to produce literature in regional languages.

Apparatus—All equipment imported from England or the United States. Only educational apparatus imported by recognized school for the blind is allowed duty free entry.

Talking Books—No regular service. The Royal Institute for the Blind, London, lends its talking books to a few blind persons in India.

Radio—No arrangement for free or reduced-price radio sets. Receiving license at reduced rate to recognized institutions for the blind, but not individuals.

ITALY

Supplementary Information to 1949 Oxford Conference Proceedings

I. ASCERTAINMENT

Definition of Blindness—Persons 1) who have only light perception; 2) whose visual acuity in both eyes does not exceed 1/20; or 3) who are completely blind in one eye and whose visual acuity in the other does not exceed 1/15 are considered blind and are entitled to receive pensions from Italian Union of the Blind.

Number of Blind Persons—Estimated at 50,000 (100 per 100,000).

II. REHABILITATION AND TRAINING

War blind trained in workshops of the National Veterans Organization. Those who have lost their sight in industrial accidents are trained by the Workmen's Compensation Board. Training of other adults is the responsibility of the Provincial Governments. Blind also may be trained in the liberal professions, typing and as masseurs at various centers.

III. EMPLOYMENT

Special Workshops	423
Home Workers	512
Business on own account	651
Factories	59
Clerical	67
Commercial representatives	301
Professional	721

IV. ECONOMIC PROVISION

Monthly assistance raised to 4,000 lire. Pensions ranging from 45,000 to 95,000 lire monthly paid to war blind by Federal Government and to industrial blind by Workmen's Compensation Board.

Special relief during winter months distributed on behalf of the Ministry of Interior to the needy blind by the Italian Union.

V. CARE OF THE BLIND AT HOME

Home teaching service, supervised by the National Federation of Institutions for the Blind, recently introduced throughout Italy.

No organized service by unpaid volunteers.

As yet no regular course of training for workers for the blind, but it is hoped that these will soon be instituted.

VI. HOMES FOR THE BLIND

Private institutions which meet a required standard receive some assistance from national and regional governments.

VIII. LEGISLATION

Legislation operated through relevant government ministries, i. e., legislation concerning education responsibility of Ministry of Education, etc.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—Reduction of 70 per cent on fares for war blind and free travel for guide.

Embossed Literature—Books on loan through National Braille Library at Monza.

Apparatus—Distributed by National Federation of Institutions for the Blind. Customs duty remitted on application by Italian Union.

Talking Books—No national program. A few talking books are imported from abroad.

Radio—Some manufacturers allow a discount to the blind. Distributed free to the needy blind by the Italian Union. Free radio receiving licenses.

JAPAN

I. ASCERTAINMENT

Definition of Blindness—Children who are unable to learn through ordinary school methods are considered blind; children who are unable to use ordinary print books are considered partially sighted. Definition prescribed by Ministry of Education.

The adult blind are those, 1) whose sight in both eyes is less than 0.1, or 2) whose sight in one eye is less than 0.02 and in the other less than 0.6, (measured by the International Eyesight Testing Table), or 3) whose limitation of field of vision is within ten degrees. Definition prescribed in the 1950 Welfare Law for the Handicapped for issuance of "Pocket-Book for the Handicapped."

Number of Blind Persons—Totally blind 61,473 (33,810 male—27,663 female); partially sighted 72,206 (39,627 male—36,579 female). Total 137,679 (200 per 100,000). Statistics for persons between the ages of 4 and 40 according to Ministry of Public Welfare (1951).

II. REHABILITATION AND TRAINING

Training in massage, moxibustion, music, etc., given to the newly blind at public and private rehabilitation centers. In addition they receive free medical treatment and special apparatus including canes, etc.

III. EMPLOYMENT

Special Workshops	36
Factories	20
Clerical	517
Commercial representatives	2,082
Teachers and Professors	701
Masseurs, acupuncturists, and moxibustionists	21,778
Other occupations	35,041

The above figures include both the blind and partially sighted.

Articles Produced—Special Workshops: tin cans, machine parts, laces.

At Home: bamboo articles, knitted goods, ceramic goods, straw goods, envelopes, paper boxes, radio assembly work.

Factory operations: punch press, tin can making, sorting.

Professions: Masseurs, acupuncturists, moxibustionists, musicians, teachers in schools for the blind.

IV. ECONOMIC PROVISION

No pension or handicap allowance for the blind. General welfare laws allow special social security benefits, partial tax remission and augmentation of wages in cases of need. Financial loans available through various private and public agencies.

General welfare law requires purchase by government agencies of articles made by the handicapped.

V. CARE OF THE BLIND AT HOME

Welfare officers of various agencies visit blind at home to advise on general, vocational, health and other problems. Unpaid volunteers provide braille and reading services.

Private agencies for the blind train visiting teachers. Braille transcribers trained at braille libraries.

VI. HOMES FOR THE BLIND

Twelve homes for adult blind operated by national and regional authorities and private agencies, and eighteen for blind children, maintained by regional authorities. No special homes for the aged or multiply handicapped blind. Blind persons suffering from leprosy accommodated in regular hospitals for lepers.

VII. RESPONSIBILITY FOR THE BLIND

Federal government—Enacts legislation, extends financial assistance to regional, and local authorities and private organizations, maintains schools and rehabilitation centers for the blind and training centers for teachers of the blind.

Regional and local authorities—Operate schools, rehabilitation centers, general welfare agencies and braille libraries.

Private Organizations—Maintain homes and schools for the blind, braille printing plants and libraries and general welfare agencies. Most private agencies work independently, though some do receive financial assistance from the federal government.

VIII. LEGISLATION

Legislation to meet the general welfare needs of the blind is operated through relevant government agencies such as Ministries of Education, Finance, Public Welfare, Labor, Transportation, etc.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—When accompanied, the blind may travel any distance at reduced fares; when alone reduction granted only for trips exceeding 101 kilometers.

Braille Literature—Most publishing carried on by self-supporting private organizations (the publishing house of the Osaka Lighthouse receives subsidy from Osaka Prefectural Government). Mainichi Press also produces publications for the blind.

Apparatus—Sold by private organizations at minimum cost. No remission of customs duties on articles from abroad.

Radio—No arrangements for distribution. License is free to needy blind.

LEBANON

I. ASCERTAINMENT

Definition of Blindness—No official definition of blindness. Children who cannot with correction read ordinary print are admitted to schools for the blind. Adults whose vision in both eyes has been damaged to a permanent and incurable degree so as to make them unable to find their way in strange places are considered blind.

Number of Blind Persons—Estimated about 3,000 (300 per 100,000).

II. REHABILITATION AND TRAINING

Training provided for Armenian blind in Workshop of the Swiss School for the Blind. Training provided for Arabic blind in workshop of British School for the Blind. Blind workers also trained as masseurs, piano teachers and for work in tobacco factory.

III. EMPLOYMENT

Special Workshops	75
Home workers	500 (mainly women)
Business on own account	20
Factories	30
Other occupations	3

The above figures are approximate.

Articles Produced—Special workshops: brushes, brooms, baskets, cane furniture, knitted goods.

At home: knitted goods, lace work, chair repairing.

Tobacco factory operations: sorting tobacco leaves and papers for cigarettes. Making packages for cigarettes.

IV. ECONOMIC PROVISION

No special allowances or pensions for the blind.

Schools for the Blind supplement wages of their blind employees. In case of illness workers receive $\frac{3}{4}$ of normal wage, doctor bills and hospital fees. Occasional gifts of clothing and food.

V. CARE OF THE BLIND AT HOME

Home visits of trained social worker provided through Swiss School for the Blind. Workers for the blind trained at school or may be sent to UN Training Center, Cairo.

VI. HOMES FOR THE BLIND

Two homes for the blind connected with schools for the blind. Swiss school accepts both men and women and the aged blind. British school accepts men only.

VII. RESPONSIBILITY FOR THE BLIND

Work for the blind carried on by voluntary agencies only.

Swiss School for the Blind and British School for the Blind primarily provide educational facilities.

Lebanese Society for the Welfare of the Blind—Prevention of blindness, assistance to aged blind. Plans the construction of two new schools for the blind during 1955 on land provided by government and with funds received through national lottery.

VIII. LEGISLATION

No legislation on behalf of the blind.

IX. SPECIAL FACILITIES FOR THE BLIND

No special facilities for the blind.

School books prepared on typewriters at school for use of students.

Institutions for the blind receive a limited customs free allowance per student per year for material and equipment imported from abroad.

NEW ZEALAND

I. ASCERTAINMENT

Definition of Blindness—"Total Blindness"—degree of permanent irremediable visual defect, in which the vision in each eye is not greater than $\frac{1}{60}$ or, in cases where vision is better than $\frac{1}{60}$ some defect of one of the visual functions, such as a severe lesion of the fields which prevents the use of that vision. "Industrial Blindness"—where the visual defect prevents the applicant from following any occupation, the criterion of industrial blindness being fixed at a) a maximum capacity of $\frac{1}{60}$ in each eye (or unable to count

fingers at one meter) or contraction of visual fields to five degrees. b) 6/60 in each eye with visual field contracted to 30 degrees. Definitions prescribed by Social Security Department for the purpose of assessing pensions.

Number of Blind Persons—2,149 (male 1,145) — (female 1,004) registered with New Zealand Institute for the Blind. (150 per 100,000).

II. REHABILITATION AND TRAINING

NZ Institute for the Blind, through its Adult Education, Vocational Guidance and Trade Training Programs, provides training and maintenance for workshop employees at its workshops in Auckland; provides training for factory workers, at centre in Auckland and branches in Wellington, Christchurch and Dunedin; provides training for professional and clerical workers at headquarters in Auckland. Financial assistance for overseas training is available if required.

III. EMPLOYMENT

Special Workshops	120
Business on own account	18
Factories	20
Clerical	8
Commercial representatives	2
Professions	8
Other occupations	5

Articles Produced—Special Workshops basketware, coir matting, ship fenders, ship nets, general rope work, navy hammocks, strawberry punnets and blackboard erasers.

At home: basketware, rope work and assembly work.

Factory operations: Assembly work.

Professions: Piano tuning, physiotherapy, administration.

IV. ECONOMIC PROVISION

Tax-free pensions provided for the blind.

Special assistance funds provided by NZ Institute to supplement wages of blind workers.

Personal assistance also provided to maintain reasonable living standard.

Government gives opportunity to tender for the supply of articles made by the blind.

V. CARE OF THE BLIND AT HOME

Home teaching, occupational therapy, etc., provided to blind at home by NZ Institute.

Workers train at headquarters of NZ Institute.

Some voluntary work also carried on.

VI. HOMES FOR THE BLIND

Seven homes, established and financed by the NZ Institute, are maintained for separate sexes and separate age groups. No facilities for additionally handicapped blind people.

VII. RESPONSIBILITY FOR THE BLIND

Complete care of the blind carried out by private organizations with assistance derived by public collection.

VIII. LEGISLATION

Legislation in favor of the blind carried out by Ministry of Education and the Social Security Department.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—Civilian blind: half rates on national railways. Limited number of free passes on local authority transport routes.

Blinded ex-servicemen: free passes with escort on national railways and local authority transport routes.

Embossed Literature—Produced and distributed through NZ Institute.

Apparatus—Produced and distributed through NZ Institute. Duty-free importation of apparatus from abroad is allowed provided it is imported through recognized authority.

Talking Books—Approximately 250 machines produced per annum.

Radios—Provided at cost or free if financial circumstances warrant. Free receiving licenses.

SPAIN

I. ASCERTAINMENT

Definition of Blindness—Those who have less than 1/10 vision (Wecker), or who cannot count fingers at one metre. Definition accepted for admission to National Organization of the Blind.

Number of Blind Persons—Estimated at 27,900 by National Organization based on its membership of 15,251 and data supplied by Provincial and Regional authorities. (90 per 100,000).

II. REHABILITATION AND TRAINING

Training facilities for adult blind exist at all regional centers of National Organization. Trainees receive same remuneration as regular employees of workshops. Blind are also trained as clerical workers for National Organization and as teachers, musicians, etc.

III. EMPLOYMENT

11,800 blind persons employed by National Organization in the sale of lottery tickets. In addition, blind are employed by National Organization as follows:

Special Workshops	84
Braille Copyists	100
In candy and lye factories	84
Clerical	35
Teachers	74
Administrators and representatives	778

Number of blind employed on own account is unknown.

Articles Produced—Special Workshops: brushes.

Factory Operations: wrapping and packing candy; manufacture of lye and similar products.

Professions: music, masseurs, teachers, lawyers, etc.

IV. ECONOMIC PROVISION

National Organization provides pensions for retired workers. No augmentation of wages required for the blind because National Organization is able to offer the blind the means of earning a salary equivalent to that of sighted workers. Medical treatment and drugs, disability, retirement and death benefits granted to employees and lottery ticket sellers by National Organization. Organization also assists widows and children of deceased employees.

National Organization of the Blind does not pay taxes for its buildings or property.

V. CARE OF THE BLIND AT HOME

No home teaching service, but National Organization workers visit if required.

VI. HOMES FOR THE BLIND

Boarding house for unmarried blind workers at Zaragoza. Similar residences are being planned for other cities. Each provincial branch of the National Organization maintains a home for the aged, abnormal and disabled blind.

VII. RESPONSIBILITY FOR THE BLIND

Responsibility for the blind is undertaken by the National Organization which has branches throughout the country. It operates under the auspices of the Home Ministry, but receives no financial assistance from governmental funds, all income being derived from the sale of lottery tickets.

VIII. LEGISLATION

All legislation for the blind concerns the work of the National Organization.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—Blind person and his guide may travel for half-fare on the Spanish National Railways. Free facilities for local travel on buses, tramways and underground allowed in some areas.

Embossed Literature—Embossed books produced in three printing plants of the National Organization and distributed to libraries, schools and individuals. Traveling libraries in some cities. Braille copyists hand transcribe special books.

Apparatus—Apparatus produced by National Organization and distributed free to school children and at cost to other blind individuals. Plans for the duty-free entry of appliances from other countries now underway.

Radio—No arrangements for supply. Free licenses for the blind on application.

SWITZERLAND

I. ASCERTAINMENT

Definition of Blindness—No official definition. 1/10 is generally accepted.

Number of Blind Persons—Between 2,500 and 3,000 (50 to 60 per 100,000).

II. REHABILITATION AND TRAINING

Permanent secretaries of several agencies for the blind visit and advise newly blind. Agencies for the blind share the cost of maintenance and training of blind persons in special workshops with the trainee's home community. Organizations for the blind extend financial assistance to schemes to integrate the blind in factory employment, if required. At present three private welfare organizations are working on the integration of the handicapped, including the blind, in factory work.

III. EMPLOYMENT

Special Workshops	600 to 700
Factories	30 to 40
Clerical work	10
Commercial representatives	"a few dozen"
Professions and at home	"about 25"

Articles Produced—Workshop: brushes, baskets, chair caning, woven and knitted goods.

Factory operations: drilling, filing, embossing, simple assembly work.

Professions: organists, masseurs, factory manager, professional secretary.

IV. ECONOMIC PROVISION

No special pensions or allowances for the blind. Health insurance at very reduced rates. No special facilities exist for the remission of taxes except in the Canton of Zurich where a reduction of 900 Sw. Frs. on taxable income is allowed.

Purchase of blind made goods not compulsory, but it is felt that the authorities are very willing to buy from the special workshops.

V. CARE OF THE BLIND AT HOME

No special services except as mentioned under II above. Two blind professional workers visit the deaf-blind in their homes.

VI. HOMES FOR THE BLIND

Fifteen homes for the blind supported by public charity, all but two accommodating both men and women. Three are for the aged blind and two for the mentally deficient blind.

VII. RESPONSIBILITY FOR THE BLIND

Work for the blind carried on by voluntary agencies only. In exceptional cases the government has granted financial assistance. Organizations for the blind are for the most part tax exempt.

VIII. LEGISLATION

At present the blind are playing an important part in the energetic efforts which are being made to secure for them a handicap allowance and disability insurance.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—When traveling on business, the blind person and his guide (or guide dog) pay only one fare on trains, buses and tram-cars. The needy blind may be issued special permits allowing a blind person and guide to travel at half-fare on the railways.

Embossed Literature—Three small braille printing houses. Costs partially met by organizations for the blind. Duty-free importation of books from abroad allowed to accredited organizations.

Apparatus—Most appliances, except braille watches, are imported. Duty-free importation allowed to accredited organizations.

Talking Book—A talking book library in German has been in existence for four years. Libraries for books in French and Italian are in course of preparation.

Radio—Provided free on loan to the blind or sold at reduced prices by private organizations. Radio tax exemption provided only to needy blind.

THAILAND

I. ASCERTAINMENT

No definition of blindness or statistics available, though it is believed that the problem is not as great as in other Eastern countries.

II. REHABILITATION AND TRAINING

A program of rehabilitation for the adult blind is being planned but has not yet been implemented.

III. EMPLOYMENT

Five blind persons are employed on handwork at home: two are employed as teachers; one is a telegrapher; one is employed in the printing plant of an ink-print magazine; one is being trained as a stereo-typist. All are graduates of the Bangkok School for the Blind.

IV. ECONOMIC PROVISION

No economic provisions for the blind.

V. CARE OF THE BLIND AT HOME

No services for the care of the blind at home.

VI. HOMES FOR THE BLIND

No homes for the blind.

VII. RESPONSIBILITY FOR THE BLIND

All work for the blind carried on by the Foundation for the Welfare and Education of the Blind in Thailand under whose auspices the Bangkok School for the Blind is operated. The school, which provides standard high school education as well as special courses in braille, handicrafts, English typing, etc., receives a small government subsidy but is supported for the most part by private donations.

VIII. LEGISLATION

No legislation in favor of the blind.

IX. SPECIAL FACILITIES FOR THE BLIND

Embossed Literature—Some books are embossed by the school for school use, others come as gifts from the United States and Japan.

UNITED STATES

Supplementary Information to 1949 Oxford Conference Proceedings

I. ASCERTAINMENT

Number of Blind Persons—314,000 (198 per 100,000) estimated by National Committee on Statistics of Blindness as of July, 1953.

Committee estimates that this will increase at a rate of 6,000 annually in future years.

IV. ECONOMIC PROVISION

The Federal government matches the monthly financial grant paid by each State to its needy blind citizens through a formula which limits the Federal share of an individual grant to \$35 monthly. This in no way limits the amount which the State may authorize, and as of March, 1954, the average grant per recipient exceeded \$55 monthly to 100,000 blind (approximately one-third of the total blind in the entire United States), with the highest average grant in any one State being \$95 monthly. Many States place no ceiling on the amount of the individual grant and in some cases it exceeds \$200 monthly. Grants are based on need, which is usually determined to be the budget deficiency established for each individual applicant—the difference between his budget and his total income from which to meet it. In considering his resources, the State is required by law to disregard the first \$50 monthly of earned income. All grants made under the above program are shared by the Federal, State, and sometimes the local government. In addition, several States also give pensions under conditions which do not conform to the Federal Social Security Act and its regulations, and for which no Federal funds are therefore available.

VIII. LEGISLATION

For purposes of reference it should be noted that the Federal Security Administration (through which certain Federally financed programs for the blind operate administratively) has since Oxford been elevated to Cabinet Status and is now designated as the Department of Health, Education and Welfare.

IX. SPECIAL FACILITIES FOR THE BLIND

The American Foundation for the Blind is not currently manufacturing or selling Talking Book Reproducing Machines, although it continues to manufacture Talking Book Records for the Library of Congress and other customers.

* * * * *

The United States has also included the following information about the education of blind children and youth.

a) *The Preschool Blind Child*: Where the home environment of the preschool blind child is satisfactory, he is usually trained in the home. Some States, through the services of specially trained workers employed by schools for the blind or state departments for the blind, provide guidance to parents in the methods of rearing blind children of preschool age. There are several nursery schools for blind babies in the United States. Where the home conditions are unsatisfactory, preschool blind children are sometimes placed in foster homes, and their training supervised by social workers or teachers in the employ of an agency or school for the blind.

b) *Residential Schools*: Each State either conducts a residential school for the blind or has a working arrangement by which it pays the cost of educating the blind child in a school operated by an authorized private agency or in a neighboring State school. Approximately 5,300 pupils are enrolled in the 51 residential schools for the blind. A residential school is a special boarding school usually serving an entire State. Generally speaking, board and tuition are furnished free.

c) *Day School Classes*: Thirty-five cities operate special day school classes for the blind, these classes being assigned a room in a public school building. In this special room part of the pupil's work is done with a special teacher, but the approximately 1,100 children attend grade rooms for much of their work, working side by side with the seeing pupils.

d) *Higher Education*: The idea of a special institution of higher learning for the blind has never found much favor in the United States, but many blind men and women attend the regular colleges and universities. The only special provision necessary to blind college students is someone to help them in the preparation of their work by reading aloud to them books which are not available in embossed type. New York State in 1907 established scholarships of \$300 (later increased to \$500) a year to employ "readers" for the blind students attending institutions of higher learning in that State. At present, 18 States have similar scholarships in varying amounts. The American Foundation for the Blind has made available a limited number of scholarships to blind students in any part of the United States, who desire to prepare themselves for specific vocations.

In recent years many State and private agencies have made special provision for students in colleges and universities by recording technical and other material, thus enabling the student to continue

his studies independently of readers by playing these recordings on Talking Book Machines.

e) *Sight-Saving Classes*: Many children have more than 20/200 vision, but still have a defect of sight which makes it impossible or inadvisable for them to be instructed in the ordinary way. Such pupils are enrolled in what are known as sight-saving classes in the various public school systems. Such classes are now to be found in many cities throughout the country.

YUGOSLAVIA

I. ASCERTAINMENT

Definition of Blindness—Persons are considered blind whose vision in the better eye with correction is less than 1/10 (persons who are unable to see fingers at more than 4 meters), as well as those whose maximum field of vision is 20 degrees. Persons who have more than 33 percent visual acuity with correction are considered partially sighted. Definition accepted by Yugoslav Ophthalmologists Conference (1953) and as basis for admission to membership in the Union of the Blind of Yugoslavia. Children who cannot use regular textbooks are admitted to schools for the blind.

Number of Blind Persons—Estimated at 18,033 (9,335 male—8,698 female) based on 1953 census, but considered under-estimate. (106.5 per 100,000).

II. REHABILITATION AND TRAINING

Newly blind adults trained in regular workshops for the blind. Union of the Blind plans to establish rehabilitation center for the newly blind during 1955. Training for work in factories carried out by Union; training in workshops and for clerical and professional work carried out by Union and Government.

III. EMPLOYMENT

Special Workshops	307
Homeworkers	63
Business on own account	87
Clerical	354
Professions	211
Other occupations	31

Articles Produced—In workshops: basketware, plastic articles, brushes, brooms, sieves, wood and cardboard items, etc.

At home: baskets, brooms, knitted goods, etc.

Factory operations: various operations in electric, metal, food, drug, office equipment, soap, tobacco, and furniture industries.

Professions: Telephonists, physiotherapists, teachers, musicians.

IV. ECONOMIC PROVISION

The war blind, those who have lost their sight at work and certain other blind persons receive a blindness allowance in addition to the regular pension. All regularly employed persons, including the blind, benefit from a social security system. Those blind persons who are unable to earn a living wage or who are unemployed receive financial assistance from the government through the Union.

A blind person who carries on a business on his own account may employ one additional person for whom he does not pay tax.

The Union receives considerable support from the government for its work, and also receives 1/5 of the income from the national lottery.

Goods manufactured by the blind are sold through regular commercial channels or through the shops of the Union.

V. CARE OF THE BLIND AT HOME

Visiting the blind at home is the responsibility of social departments of local governments and local committees of the Union, but no regular service is provided.

Short courses for workers for the blind held by the Union and the government. Course on the problems of the blind included in the curriculum of the School for Social Workers at Zagreb. Teachers of the blind trained in special school for teachers of the handicapped in Belgrade.

VI. HOMES FOR THE BLIND

Four homes for the aged blind financed by the government either directly or through the Union; one home for the mentally handicapped blind and one for the blind with other disabilities.

VII. RESPONSIBILITY FOR THE BLIND

Federal Government—Enacts legislation in favor of the blind, and extends certain financial assistance through its social security and other programs.

Regional Authorities—Maintain schools for blind children and training centers for blind youth.

Local Authorities—Maintain schools and training centers for the blind as well as general welfare services, and extend some financial assistance.

Union of the Blind—Acts as consultant to the government on problems of the blind, maintains services for the education, training, employment and general welfare of the adult blind.

VIII. LEGISLATION

National government and regional authorities have enacted laws for the welfare of the blind. An over-all program of "cradle to the grave" legislation in favor of the blind is now under consideration. Such legislation is generally the responsibility of the Council for National Health and Social Affairs.

IX. SPECIAL FACILITIES FOR THE BLIND

Transport—Blind persons may travel six times a year on long distance trains, ships or buses at 75 percent fare reduction. On such occasions escorts may travel free when accompanying a blind person, and free on third class trains when traveling alone to meet or when returning home after having traveled with a blind person. For local travel the blind may travel free and escorts at minimum fares.

Embossed Literature—Manufactured and distributed by Union of the Blind. Program financed by Union from government subventions and National Lottery income. All braille publications and letters may be sent free of postal charges to local and foreign addresses.

Apparatus—Manufactured and distributed by Union of the Blind, with governmental financial support. Apparatus for the blind may be imported from other countries without the payment of customs charges.

Radio—Union assists the blind to purchase radios. Blind receive free radio receiving licenses.

REPRESENTATIVE MEMBERSHIP

NOTE: List is correct to October, 1955.

Number in parentheses denotes number of Representatives to which country is entitled.

AUSTRALIA (2)

Dr. Charles W. Bennett, President,
Australian National
Council for the Blind
557 St. Kilda Road
Prahnan, Victoria

AUSTRIA (2)

Leopold Bick, President
Osterreichischer Blindenverband
Wimberggasse 30
Vienna VII

BELGIUM (2)

Gerard Borre, President
Ligue Braille
Rue d'Angleterre 57
Brussels
Ernest Jacobs
Licht en Liefde
19 rue Jerusalem
Bruges

BRAZIL (6)

Prof. Jose Espinola Veiga
Instituto Benjamin Constant
Rio de Janeiro
Senora Dorina Nowill, President
Brazilian Foundation for the
Blind
Rua Dr. Diogo de Faria 558
Sao Paulo

CANADA (2)

Col. E. A. Baker, Managing Director,
Canadian National Institute for the Blind
186 Beverley Street
Toronto, Ontario
Mrs. W. C. Bending, President
Canadian Council of the Blind
96 Ridout Street South
London, Ontario

CEYLON (2)

Kingsley Dassanaikie, Principal
School for the Blind
Mt. Lavinia

COLOMBIA (2)

Juan Antonio Pardo Ospina, Director,
National Federation of the Blind
Carrera 10, No. 15-80
Bogota
Francisco Luis Hernandez, Principal,
School for the Blind
Medillin

DENMARK (2)

Hans Seierup, Director
Dansk Blindesamfund
Randersgade 68
Copenhagen
N. B. Moller-Nielson, Vice-President,
Dansk Blindesamfund
Randersgade 68
Copenhagen

EGYPT (4)

Dr. A. M. Nour, Director
Demonstration Centre for the
Rehabilitation of the Blind
302 Sh. Terret El Gabal
Zeitoun, Cairo

EIRE (2)

James O'Keeffe, Secretary
Irish National League of the Blind
35 Gardiner's Place
Dublin
Miss Barbara Knox, Organising
Secretary, National Council
for the Blind
11 Molesworth Street
Dublin

FINLAND (2)

Eero Hakkinen, Principal
School for the Blind
Kuopio
Einar Juvonen
Sokeain Keskusliitto
Pengerkatu 11
Helsinki

FRANCE (6)

Henri Amblard, Secretary General,
Union des Aveugles de Guerre

49 rue Blanche

Paris 9

Louis Renaux, Secretary General,
Association Valentin Haüy

9 rue Duroc

Paris 7

Donatien Lelievre, Director
Institution Regionale des Sords-
Muets et Jeunes Aveugles

61 rue de Marseilles

Bordeaux

Comm. H. Izaac, President

Union des Aveugles de Guerre

49 rue Blanche

Paris 9

Paul Guinot, President

Cannes Blanche

58 Avenue Bosquet

Paris 7

Antoine Salis

27 rue Louis Braille

St. Etienne, Loire

GERMANY (6)

Prof. Dr. Carl Strehl, President
Verein der blinden Geistesar-
beiter e.V.

Liebigstrasse 11

Marburg-Lahn (16)

Dr. Horst Geissler, Vice Presi-
dent, Deutscher Blindenver-
band e.V.

Germanenstrasse 32

Bad Godesberg (22C)

Dr. Alfons Gottwald, President
Deutscher Blindenverband e.V.

Schwanstrasse 18

Bad Godesberg (22C)

Dr. Carl Kirchner, Vice Presi-
dent, Bund der Kriegsblinden
Deutschland e.V.

Im Schule 13

Stuttgart (14A)

Dr. Hans Ludwig, President
Bund der Kriegsblinden Deutsch-
land e.V.

Schumanstrasse 35

Bonn/Rhein

Dr. Rudolf Winter, Director
Verein Deutscher Blindenlehrer
Bleekstrasse 22
Hannover-Kirchrode

GREECE (2)

Michael Tsamados, President
Lighthouse for the Blind
25 Nikis Street

Athens

Emmanuel Kefakis, Director
Agricultural School for the Blind
Sepolia, Athens

HAITI (2)

Jean Sorel, Secretary
Haitian Society for the Blind
57 Avenue Lamartiniere

P. O. Box 555

Port-Au-Prince

INDIA (6)

R. M. Alpaiwala, President
National Association for the
Blind

c/o Victoria Memorial School
for the Blind

Tardeo, Bombay 7

Col. Sir Jamshedji N. Duggan,
Vice President, National As-
sociation for the Blind

c/o Victoria Memorial School
for the Blind

Tardeo, Bombay 7

Amal Shah, Vice President
National Association for the
Blind

c/o Calcutta Blind School

P. O. Behala

Calcutta

D. Edward Jonathan, Principal
School for the Blind

Palamcottah

Ramachandra Rao, Principal
Government School for the
Blind and Deaf

Hyderabad, Deccan

Capt. H. J. M. Desai, Honorary
Secretary, National Associa-
tion for the Blind

c/o Victoria Memorial School
for the Blind

Tardeo, Bombay 7

ITALY (6)

Prof. Paolo Bentivoglio, President,
Unione Italiana Ciechi
Via Quattro Fontane 147
Rome

Prof. Angelo Bonvino
Unione Italiana Ciechi
Via Bonifacio N. 4/10
Genoa

Col. Gian Emilio Canesi, President,
National Braille Library
Via Bolognese n. 100
Florence

Prof. Simone Lo Sciuto, Director
Institute for the Blind
Piazza General Cascino n. 111
Palermo

Prof. Silvestro Sasso
Unione Italiana Ciechi
Via Garruba n. 3
Bari

Rag. Umberto Trani
Unione Italiana Ciechi
Viale Beatrice d'Este n. 15
Milano

JAPAN (6)

Tokujiro Torii, President
Japan United Associations of
the Blind
11 Kami Wakakusa-cho Murasakino
Kamikyo-ku
Kyoto City

Hideyuki Iwahashi, Chief Director,
Lighthouse Welfare Center for the Blind
17, Nishi 3-chome, Showacho,
Abeno-ku
Osaka City

Katoharu Nagaoka, Managing-
Editor, Braille Mainichi
36, 2-chome, Kami Dojima,
Kita-ku
Osaka City

Kenji Matsuno, President
Japan Educational Association
for the Blind
c/o Government School for the
Blind
120 Zoshigaya, Bunkyo-ku
Tokyo

Ryuji Goto
Japan Educational Association
for the Blind
c/o Government School for the
Blind
120 Zoshigaya, Bunkyo-ku
Tokyo

Yoshiki Kataoka, Director
Japan United Associations of
the Blind
5, 3-chome, Orido-cho, Showa-ku
Nagoya City

JORDAN (2)

S. T. Dajani, Chairman
Arab Blind Organisation
Inside Damascus Gate
Jerusalem

LEBANON (2)

Karl Meyer, Director
Institute for the Armenian Blind
Bourj-Hammoud
Beirut

MEXICO (4)

Dr. Andres Bustamente Gurria,
Director, Board of Rehabilitation
of the Handicapped
Calle de Niza y Londres
Mexico, D. F.

Prof. Alejandro Meza
Calle sur 101-A 405
Col. Heroes de Churubusco
Mexico 13, D. F.

Prof. Maurilio Proa
Paseo de la Reforma
Desp. 210 y 211
Mexico, D. F.

NETHERLANDS (2)

F. G. Tingen, Executive Director
Dutch Foundation for the Blind
Vondelstraat 128
Amsterdam W1.

F. Koonen
Dutch Foundation for the
Blind
Don Boscostraat 9
Eindhoven

NEW ZEALAND (2)

E. W. Christiansen, Director
New Zealand Institute for the
Blind
545 Parnell Road
Auckland S. E. 1

Cyril C. W. White, President
Dominion Association of the
Blind
27 Ayr Street
Parnell
Auckland C. 4

NORWAY (2)

Halvdan Karterud, Secretary
General, Norges Blindefor-
bund
Ovre Mollenberggt. 76
Trondheim

Asmund Flatov, Vice President
Norges Blindeforbund
Rosenkrantz Gt. 5
Bergen

PHILIPPINES (4)

Victor Baltazar, Supervisor
Office of Vocational Rehabilita-
tion
Social Welfare Administration
Manila

Dr. Jesus Tamesis, Secretary
Philippine Ophthalmological and
Otolaryngological Society
19 Macopa Street
Quezon City

SPAIN (4)

Jose Esquerro Berges, Director
National Organization of the
Blind
Jefatura Lista 18
Madrid

Luis Blanco Valldeperez
Superior Council for the Blind
Madrid

Don Juan Munoz Morales, Chief
Educational Division
National Organization of the
Blind
Madrid

Don Rafael Rodriguez Albert,
Chief, Department of Ex-
ternal Affairs
National Organization of the
Blind
Madrid

SWEDEN (2)

Charles Hedkvist, Secretary
De Blindas Forening
Gotlandsgatan 46
Stockholm

SWITZERLAND (2)

Dr. E. Spahr, President
Swiss Federation of the Blind
Trottenstrasse 33
Zurich

THAILAND (2)

Lady Leka Aphaivongse, Pres-
ident, Foundation for the
Welfare and Education of
the Blind
420 Rajavidhi Road
Phayathai, Bangkok

Mrs. Saman Damrong, Secre-
tary, Foundation for the Wel-
fare and Education of the
Blind
420 Rajavidhi Road
Phayathai, Bangkok

TURKEY (4)

Mitat Enc, Director
School for the Blind
Gar, Ankara

Remzi Oncul
Educational Board
Ministry of Education
Ankara

Husnu Argun, Assistant Direc-
tor, Elementary School De-
partment
Ministry of Education
Ankara

Gultekin Yazgan
School for the Blind
Gar, Ankara

UNION OF SOUTH AFRICA (2)

Dr. Louis van Schalkwijk, Chair-
man, S. A. National Council
for the Blind

P. O. Box 1343
Pretoria, Tvl.

D. J. Van Wyk, Organising Sec-
retary, S. A. National Coun-
cil for the Blind
616 Permanent Buildings
Paul Kruger Street
Pretoria, Tvl.

UNITED KINGDOM (6)

J. C. Colligan, Secretary Gen-
eral, Royal National Institute
for the Blind
224 Great Portland Street
London W1, England

C. H. W. G. Anderson, Head-
master, Royal Blind School
Craigmillar Park
Edinburgh 9, Scotland

W. G. Askew, Secretary
St. Dunstan's
Greenwayes
Bois Lane
Chesham Bois, England

E. H. Getliff, Superintendent
Royal Blind Asylum
St. George Road
Park Street
Bristol, England

T. H. Smith, Secretary
National League of the Blind
262 Langham Road
London N. 15, England

S. W. Starling, Chief Executive
Officer, Incorporated Associa-
tion for Promoting the Gen-
eral Welfare of the Blind
257 Tottenham Court Road
London W1, England

UNITED STATES (6)

M. Robert Barnett, Executive
Director, American Founda-
tion for the Blind
15 West 16th Street
New York 11, New York

Alfred Allen, Secretary General
American Association of
Workers for the Blind
15 West 16th Street
New York 11, New York

George Card Vice President
National Federation of the Blind
605 South Few Street
Madison, Wisconsin

Joseph F. Clunk, Director
Philadelphia Branch
Pennsylvania Association for
the Blind
100 East Price Street
Philadelphia, Pennsylvania

Peter J. Salmon, Executive Di-
rector, Industrial Home for
the Blind
57 Willoughby Street
Brooklyn, New York

Robert H. Thompson, Vice Pres-
ident, American Association
of Instructors of the Blind
c/o Missouri School for the Blind
3815 Magnolia Avenue
St. Louis, Missouri

YUGOSLAVIA (2)

Stevan Uzelac, President
Union of the Blind
Post Box 807
Belgrade

Milos Licina, Vice President
Union of the Blind
Post Box 807
Belgrade

HONORARY MEMBERSHIP

W. McG. Eagar, Vice Chairman
British Empire Society for the
Blind
and

Former Secretary General
National Institute for the Blind
Spange Hawe
Ewhurst, Guilford
Surrey, England

Dr. Robert B. Irwin (Posthumously) . Former Executive Director American Foundation for the Blind American Foundation for Overseas Blind	George L. Raverat, Former European Director, American Foundation for the Blind 36 rue Raymond Poincare Vaucresson Seine et Oise, France Harald Thilander Blindskriftstryckeri Stocksund, Sweden
Dr. Helen Keller Westport, Connecticut	

EXECUTIVE COMMITTEE

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<i>Treasurer</i>	Henri Amblard (France)

* * * * *

Alfred Allen (United States)	F. G. Tingen (Netherlands)
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Kingsley Dassanaïke (Ceylon)	E. H. Getliff, Chairman Consultative Committee on Education (United Kingdom)
Mitat Enc (Turkey)	Sir Clutha Mackenzie, Chairman Consultative Committee on Braille World Braille Council UNESCO House 19 Avenue Kleber Paris 16, France
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Sir Clutha Mackenzie

*Committee on Prevention of Blindness*Mitat Enc (Turkey), **Chairman**

Dr. Andres Bustamente Gurria (Mexico)

Ernest Jorgensen
Dansk Blindesamfund
Randersgade 68
Copenhagen, DenmarkJohn Wilson, Director
British Empire Society for the Blind
121 Victoria Street
London SW 1, England*Committee on Services for the Deaf-Blind*Peter J. Salmon
(United States), **Chairman**

(committee members to be named)

CONSULTATIVE COMMITTEES

*Consultative Committee on Education*Dr. Gabriel Farrell, Honorary **Chairman**

Tanry Doon

Rochester, Massachusetts

E. H. Getliff (United Kingdom), **Chairman**Pierre Henri, Associate **Chairman**

c/o National Institute for the Young Blind

56 Boulevard des Invalides
Paris, FranceDr. C. M. Waller Zeper, **Secretary**c/o School for the Blind
Bussum, NetherlandsEdward J. Waterhouse, Associate **Secretary**c/o Perkins Institution
Watertown 72, MassachusettsJohn Jarvis, Associate **Secretary**
c/o Royal National Institute for the Blind224 Great Portland Street
London W1, England

C. H. W. G. Anderson (United Kingdom)

- Eric T. Boulter (United States)
 J. C. Colligan (United Kingdom)
 Finis Davis
 American Printing House for the Blind
 Louisville, Kentucky
 Eero Hakkinen (Finland)
 Halvdan Karterud (Norway)
 J. Lenaerts
 Institut Provincial du Brabant
 311 rue de Grand-Bigard
 Berchem-sainte-Agathe, Belgium
 Donatien Lelievre (France)
 Milos Licina (Yugoslavia)
 Mrs. Elena Romagnoli-Coletta
 Federation of Institutions for the Blind
 Piazza Sallustio 24
 Rome, Italy
 Dr. Carl Strehl (Germany)
 Dr. O. Wanacek
 Institute for the Blind
 Hofziele 15
 Vienna, Austria
 Dir. Rudolf Winter (Germany)
Consultative Committee on Braille (World Braille Council)
 Sir Clutha Mackenzie, Chairman
 World Braille Council
 UNESCO House
 19 Avenue Kleber
 Paris 16, France
- Pierre Henri, Vice Chairman
 c/o National Institute for the Young Blind
 56 Boulevard des Invalides
 Paris, France
 John Jarvis, Vice Chairman
 c/o Royal National Institute for the Blind
 224 Great Portland Street
 London W1, England
 Lal Advani
 Blind Welfare Section
 Ministry of Education
 New Delhi, India
 Sayed Abdel Fattah
 Ministry of Education
 Cairo, Egypt
 Prof. Li Fan Kuei
 Washington University
 Seattle, Washington
 Juan Antonio Pardo Ospina
 (Colombia)
 L. W. Rodenberg
 Illinois School for the Blind
 Jacksonville, Illinois
 John Wilson
 British Empire Society for the Blind
 121 Victoria Street
 London SW 1, England



